MOORE BCS

BUSINESS OPPORTUNITY ANALYSIS

INPUT

About INPUT

INPUT provides planning information, analysis, and recommendations to managers and executives in the information processing industries. Through market research, technology forecasting, and competitive analysis, INPUT supports client management in making informed decisions.

Continuous-information advisory services, proprietary research/consulting, merger/acquisition assistance, and multiclient studies are provided to users and vendors of information systems and services (software, processing services, turnkey systems, systems integration, professional services, communications, systems/software maintenance and support).

Many of INPUT's professional staff members have more than 20 years' experience in their areas of specialization. Most have held senior management positions in operations, marketing, or planning. This expertise enables INPUT to supply practical solutions to complex business problems.

Formed as a privately held corporation in 1974, INPUT has become a leading international research and consulting firm. Clients include more than 100 of the world's largest and most technically advanced companies.

INPUT OFFICES

North America

Headquarters
1280 Villa Street
Mountain View, CA 94041-1194
(415) 961-3300
Telex 171407 Fax (415) 961-3966

New York
959 Route 46 East, Suite 201
Parsippany, NJ 07054
(201) 299-6999
Telex 134630 Fax (201) 263-8341

Washington, D.C.
1953 Gallows Road, Suite 560
Vienna, VA 22182
(703) 847-6870 Fax (703) 847-6872

International

Europe
Piccadilly House
33/37 Regent Street
London SW1Y 4NF, England
(01) 493-9335
Telex 27113 Fax (01) 629-0179

Paris
52, boulevard de Sébastopol
75003 Paris, France
(33-1) 42 77 42 77 Fax (33-1) 42 77 85 82

Tokyo
Saida Building
4-6, Kanda Sakuma-cho
Chiyoda-ku, Tokyo 101, Japan
(03) 864-0531 Fax (03) 864-4114

00902

DECEMBER 1989

MOORE BCS BUSINESS OPPORTUNITY ANALYSIS

INPUT LIBRARY

INPUT®

1280 Villa Street, Mountain View, California 94041-1194 (415) 961-3300

MOORE BCS
BUSINESS.
Opportunity ANALysis

ZMDS-FR
DEC 89
C. 2

AUTHOR

TITLE

DATE LOANED	BORROWER'S NAME

CAT. No. 23-108 PRINTED IN U. S. A.

Preface

This volume is the final report of the 1989 Moore BCS business opportunity analysis study. It serves the central mission of analyzing the findings of thirteen separate vertical market studies and consolidating them in one overall cross-industry assessment to assist Moore BCS in focusing its business activities.

The results of the thirteen (separately bound) vertical market studies are incorporated here by this reference to them.

Table of Contents

I. Introduction I-1

A. INPUT Research Objectives I-2

B. Moore BCS Study Purpose I-3

C. Research Scope I-4

D. Definitions I-5

E. INPUT's Research Process I-7

F. Vertical Market Report Development Process I-10

G. Measurement Methodologies I-11

H. Interpretation Guidelines I-14

II. Vertical Market Opportunity Summaries II-1

A. Insurance Industry Summary II-2

B. Finance Industry Summary II-4

C. Retail Industry Summary II-6

D. State and Local Government Summary II-8

E. Education Industry Summary II-10

F. Telecommunications Industry Summary II-12

G. Manufacturing Industry Summary II-14

H. Wholesale Industry Summary II-16

I. Transportation Industry Summary II-18

J. Health Care Industry Summary II-20

K. Utilities Industry Summary II-22

L. Services/Other Industry Summary II-24

M. Federal Government Summary II-26

Table of Contents

III. Basic Opportunities III-1

A. Basic Services—General Findings III-2

B. Distribution of Basic Opportunities by Industry III-4

C. Distribution of Basic Opportunities by Target Audience III-6

D. Where Are the Biggest Basic Service Applications? III-8

E. What Are the Cross-Industry Basic Opportunities? III-10

F. Statement Services III-12

G. Card Services Opportunity III-14

H. Basic Services Conclusions III-18

I. Basic Services Recommendations III-20

IV. Enhanced Service Opportunities IV-1

A. Enhanced Services—General Findings IV-3

B. Distribution of Enhanced Opportunities by Industry IV-4

C. Distribution of Enhanced Opportunities by Target Audience IV-6

D. Where Are the Big Enhanced Service Opportunities? IV-8

E. What Does It Look Like Without EDI? IV-10

F. Where Are the Cross-Industry Enhanced Opportunities? IV-12

G. EDI Services IV-14

H. EFT/ACH Services IV-20

I. Retail Lockbox Services IV-22

J. Enhanced Services Conclusions and Recommendations IV-24

Table of Contents

V. The Whole Picture—Combined Basic and Enhanced Opportunities V-1

A. Distribution of Combined Opportunities By Industry V-2

B. Distribution of Combined Opportunities By Target Audience V-4

C. Where Are the Big Combined Opportunities? V-6

D. What Are the Combined Big Cross-Industry Opportunities? V-8

E. Overall Conclusions V-11

F. Overall Recommendations V-12

Appendix A: EDI Opportunity Size Calculation A-1

Appendix B: Cross-Industry Applications Opportunity Attractiveness B-1

Appendix C: *The Wall Street Journal*, 'Sell the Mailroom' C-1

Digitized by the Internet Archive
in 2015

https://archive.org/details/moorebcsbusinessunse

I. Introduction

A. INPUT Research Objectives

1. Evaluate market opportunities for current Moore BCS services

- Application types
- Vertical markets

2. Identify and evaluate new value-added opportunities

- Service type
- Vertical market
- Sales/delivery mechanisms

3. Analyze cross-industry business opportunities

4. Use a 3-5 year planning horizon that:

- Accommodates new technology lead times
- Doesn't relieve necessity to move aggressively now

5. Business opportunity assessment questions:

- Is it real? (INPUT research objective)
- Can BCS win? (BCS responsibility)
- Is it worth it? (BCS responsibility)

B. Moore BCS Study Purpose

Provide Moore BCS with an information base to:

1. Guide transition from product supplier to successful solution provider

2. Develop a market strategy focus

- Vertical markets
- Cross-industry services
- Specific applications

3. Guide BCS implementation planning

- Product/service development priorities
- Marketing plans/promotional plans
- Alliances
- Acquisitions
- Sales strategy
- Personnel assignments
- Organizational strategy
- Investment requirements/priorities

4. Achieve:

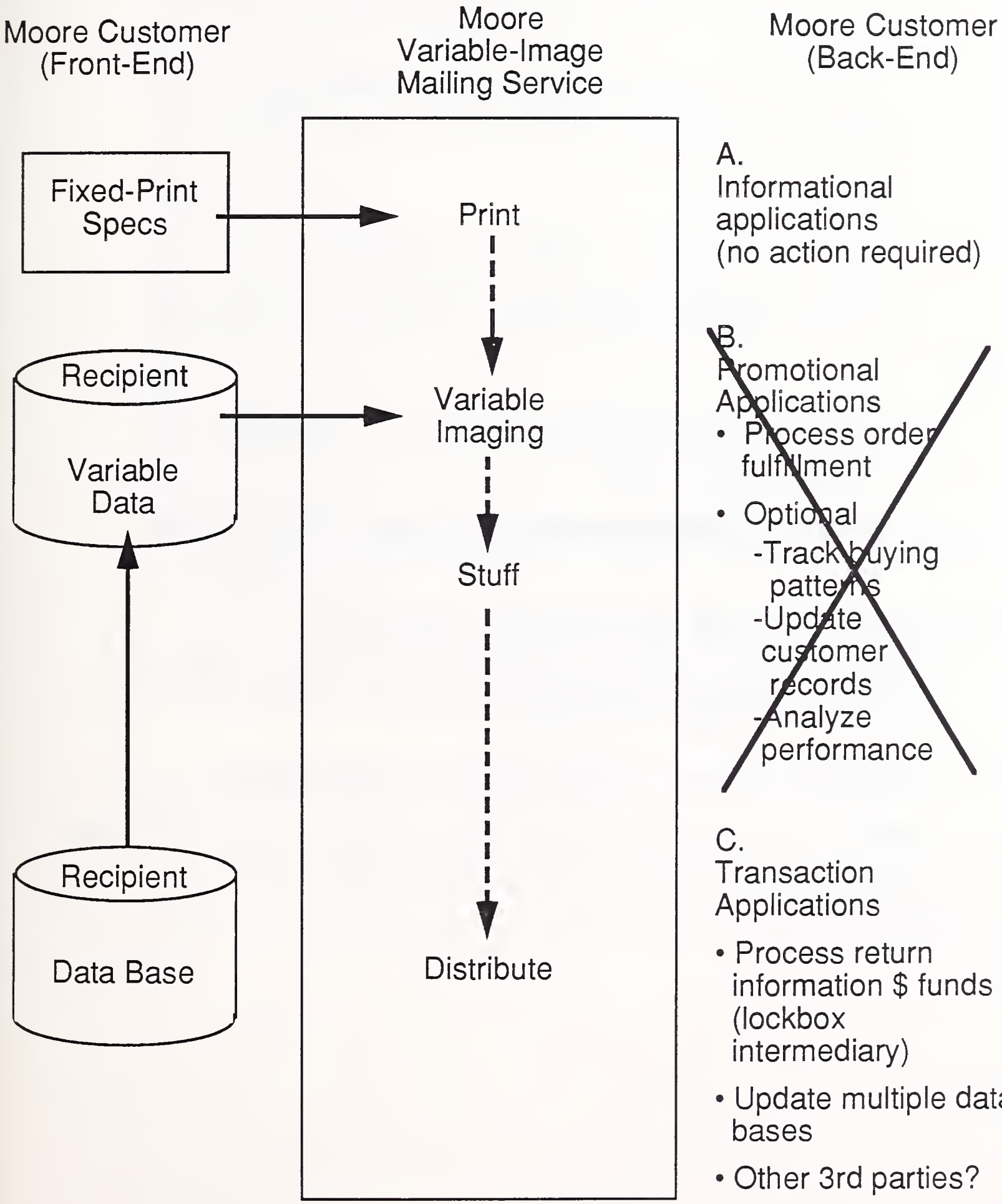
- Increased sales effectiveness
- Reduced unit production costs
- Increased revenue and earnings growth

C. Research Scope

1. Thirteen vertical markets
   - Six covered in depth
     - Insurance
     - Finance
     - Retail
     - State & local government
     - Education
     - Telecommunications
   - Seven with abbreviated coverage
     - Manufacturing
     - Wholesale
     - Transportation
     - Health care
     - Utilities
     - Services
     - Federal government
2. Card processing studied as a special case
3. Service types
   - Basic (BCS business today)
   - Enhanced (BCS future business)
4. Focused on repetitive mission-critical applications rather than ad hoc or 1099 type business
5. Excluded promotional mailings (except for education)

D. Definitions

1. Business mailing process chronology—front- and back-end services



D. Definitions

2. Application/service definitions

Basic Services

- Variable-image printing or embossed cards, plus related mailing services such as stuffing, sealing, metering, sorting, and post office delivery

Enhanced Services

- Basic services, as defined above, when integrated with any value-added front-end or back-end services. Typically of information services content (e.g., data base management) but also including any other business services (e.g., lockbox)

(and/or)

- All-electronic solutions as a replacement for, or supplement to, paper-based business communications (e.g., Electronic Data Interchange, or EDI)

3. Mission-critical applications definition

- *User* defined as being more important than other variable-image mailings
- High frequency, high volume, predictable
- Better business for BCS than the current mix of ad hoc, project-oriented overflow work with peaks and valleys

E. INPUT's Research Process

1. Understand the current BCS business

- Internal interviews
  - Management
  - Finance
  - Marketing
  - Sales
  - Manufacturing
- Facility visits
  - Thurmont
  - Elk Grove
- Detailed analysis of 60 product samples across all industries
- Eight on-site interviews with current customers in different industries and geographic regions

2. Team with BCS marketing on vertical market studies

3. On-site client review of results from first vertical study

E. INPUT's Research Process

4. Complete verticals research
   - 300 vertical telephone interviews
   - Half senior executives; half operating managers
   - Required approximately
     - 3600 calls, to get
     - 1200 valid company contacts, to get
     - 300 valid interviews

5. Senior researcher "group think" on findings

6. BCS marketing review of draft findings, conclusions, and recommendations

7. Prepare and deliver final report and presentation

IDS Internal Interviews

Mike McFarland	General Manager
Steve Coleman	VP Marketing (USBF&SD)
Dennis Dracup	Controller
Cheryl Johnston	Manager, Marketing Planning
Jim Nelson	Finance Marketing
Ann Perraud	Insurance, Healthcare Mktg.
Sam Davis	Government and Utilities Mktg.
Martha Balshaw	Card Services Marketing
Wes McCracken	Midwestern Area Manager
Tom Booth	Eastern Area Manager
Lois Nestor	Eastern District Manager
Dennis Bailey	Western Area Manager
Joe Colombatto	Thurmont Facility Manager
Jenny Ogle	Elk Grove Facility Manager

F. Vertical Market Report Development Process

Step

#1 Review Moore BCS marketing plan (where available) and INPUT MAPS program vertical market analysis report

#2 Clarify with BCS marketing as necessary

#3 Researcher develops research plan and reviews with INPUT project leader

#4 Researcher and INPUT project leader review research plan with client and gain approval (fax plan description and discuss on phone with Cheryl Johnston and marketing manager)

#5 Perform interviews and preliminary analysis

#6 Review preliminary findings with client by phone

#7 Complete first draft report and submit to INPUT project leader

#8 Revise/edit/proofread

#9 Send final draft to client for review

#10 Make any necessary client revisions

#11 Print and bind

#12 Deliver to client

G. Measurement Methodologies

1. All measurement methods, assumptions, and calculations are openly reported and easily changed to accommodate different perceptions and/or new findings

2. Opportunity size measures

≠ Market Forecast

= Real or latent potential user

$ expenditures on the application

example: P&C insurance premium notices
$ Opportunity

= # of P&C premium notices/year x unit cost

= 1.3 billion x $0.13/unit

= $169 million/year

(all unit costs were supplied by BCS marketing)

One exception: As part of its search for enhanced services, INPUT evaluated the potential for EDI applications. INPUT has a major EDI research service that has developed detailed estimates of the size of the EDI market for different vertical markets. A team of senior INPUT consultants took the most recent INPUT research studies, estimated EDI market penetration in the applicable industries, and projected the total potential size of the EDI opportunity by dividing the market size by the estimated penetration rate.

G. Measurement Methodologies

3. Opportunity Attractiveness =
size x willingness to outsource x level of pain/problem

Size scale 1 to 5:

- 1 $1 - 100 million
- 2 101 - 300 million
- 3 301 - 700 million
- 4 701 - 1000 million
- 5 > 1000 million

Willingness to Outsource (subjective 1-to-5 scale)

Level of Pain or Problem (subjective 1-to-5 scale)

Note: this is a geometric (nonlinear) rating scale

- 5x5x5 = 125 max rating
- 3x3x3 = 27 middle rating

G. Measurement Methodologies

4. Bias in opportunity size and attractiveness ratings:

- Application Selection Criteria—focuses on mission-critical
  - Ignores most W2, 1099 opportunities
  - Excludes many ad hoc "today type" opportunities
- Attractiveness ratings overstate value for industries with many small applications

5. INPUT process for maintaining consistency in subjective ratings:

- Use standard, proven techniques in interviewing and documenting responses (e.g., 1 to 5 rating scale with definitions)
- Use the same research process and methodology for all verticals
- Project manager responsible for consistency/quality assurance
- Use senior (experienced) researchers
- Use as few researchers as possible (leverage their learning)—four primary team members
- Interaction among research team members in comparing/discussing findings
- Conduct multiple internal reviews and client reviews of research findings and conclusions

H. Interpretation Guidelines

1. In subjective judgments, INPUT has consistently attempted to understate opportunities

2. More important than the absolute measures of opportunity size and attractiveness is their relative values—the BCS business objective is focus, i.e., which opportunity is better or worse, not what shade of grey it is.

3. In spite of depth and breadth of the research, exceptions will probably be found....

- Most will be a matter of opinion or perspective
- Some will be a matter of fact

Any subsequent change desired by BCS can be easily accommodated in the quantitative analysis.

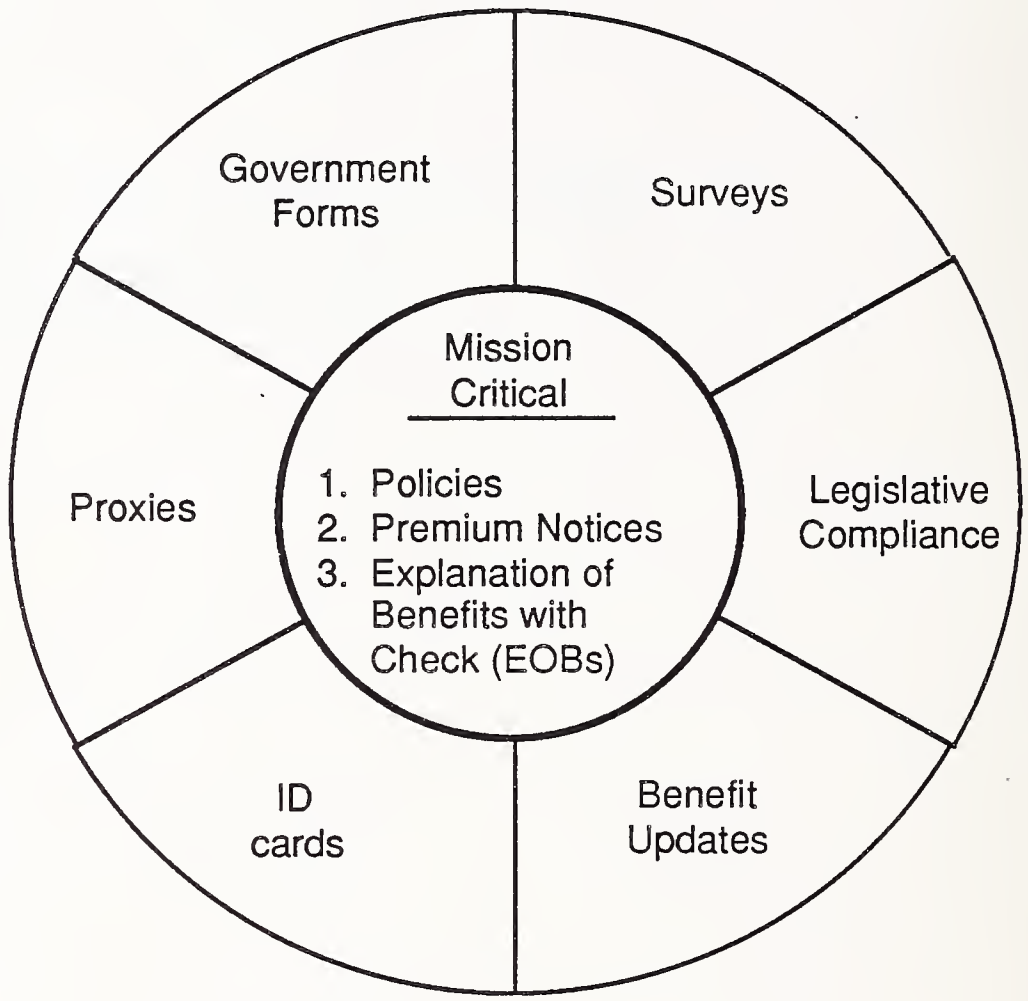
II. Vertical Market Opportunity Summaries

A. Insurance Industry Summary

1. Segments studied:
- Property and casualty
- Life and health
- Third-party administrators
- Blue Crosses

2. Applications considered:

Applications Considered



3. Basic service opportunities cross most segments— EOBs in Life and Health segment is most attractive

Basic Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Auto ID	56	1		1		2		2
Policies	455	3		1		2		6
Premiums	245	2		1		1		2
EOBs with checks	187	2		2		3		12
Total basic	887							22

A. Insurance Industry Summary

Relative Attractiveness Ratings of Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Bill/Collect	433	3		1		1		3
EFT/ACH	470	3		3		2		18
Bar Code	642	3		1		3		9
Elect. Images	424	3		4		3		36
EDI Claims	1,694	5		5		4		100
Total Enhanced	3,719							

4. Numerous enhanced service opportunities—al so concentrated in the life and health segment

5. Basic services target consumers only; enhanced services target businesses as well (EDI claims). This is the leading industry for internal efficiency applications.

Opportunity Attractiveness by Target Audience
(Attractiveness Rating Scores)

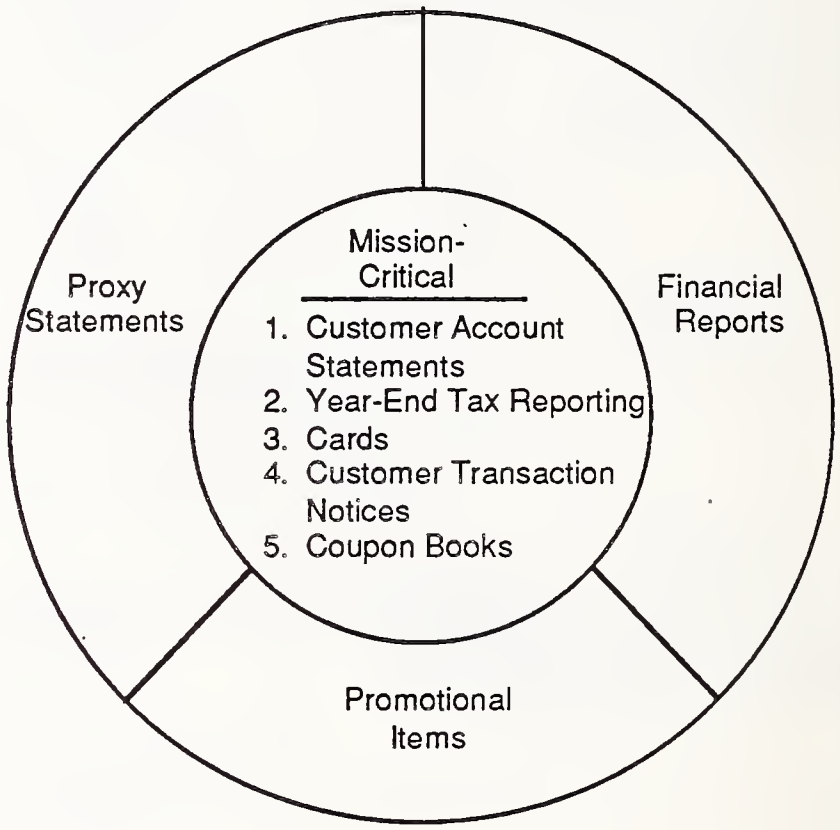
Type of Service	Target Audience: Owners	Employees	Customers: Business	Customers: Consumer	Suppliers	Internal Efficiency	Total
A. Basic				EOBs (12) Auto ID (2) Policies (6) Premium (2)			
Subtotal				(22)			(22)
B. Enhanced			EDI Claims (100)	EFT/ACH Collection (18) Bill/collect (3)		Electronic imaging (36) Bar code (9)	
Subtotal			(100)	(21)		(45)	(166)
Total			(100)	(43)		(45)	(188)

6. Overall: A promising industry for enhanced opportunities (EDI) connected to basic applications (EOBs)

B. Finance Industry Summary

1. Segments studied:
   - Banks
   - S & Ls
   - Credit unions
   - Finance companies
   - Full-line brokerages
   - Fund managers
   - Mortgage servicers

2. Applications considered:



3. Many substantial basic opportunities exist—unfortunately the largest is a January job

Basic Services Opportunities

Type	Size ($ Millions)	Relative Size	X Willingness to Outsource	X Level of Pain or Problem	= Attractiveness Rating Value
Year-End Tax Reporting	138	2	4	5	40
Customer Account Statements	1,296	5	2	2	20
Cards					
• Bank Credit	200	2	3	3	18
• ATM	136	2	3	3	18
Coupon Books	150	2	5	1	10
Proxies	66	1	4	1	4
Customer Transaction Notices	40	1	1	2	2
Total	2,026				112

B. Finance Industry Summary

4. Enhanced service opportunities in finance are limited in both size and number

Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Retail Lockbox Services for:								
• Loans	1,620	5		2		2		20
• Credit Cards	1,170	5		1		2		10
Total	2,790							30

5. Basic services target consumer audiences, while enhanced services provide internal efficiency for customers

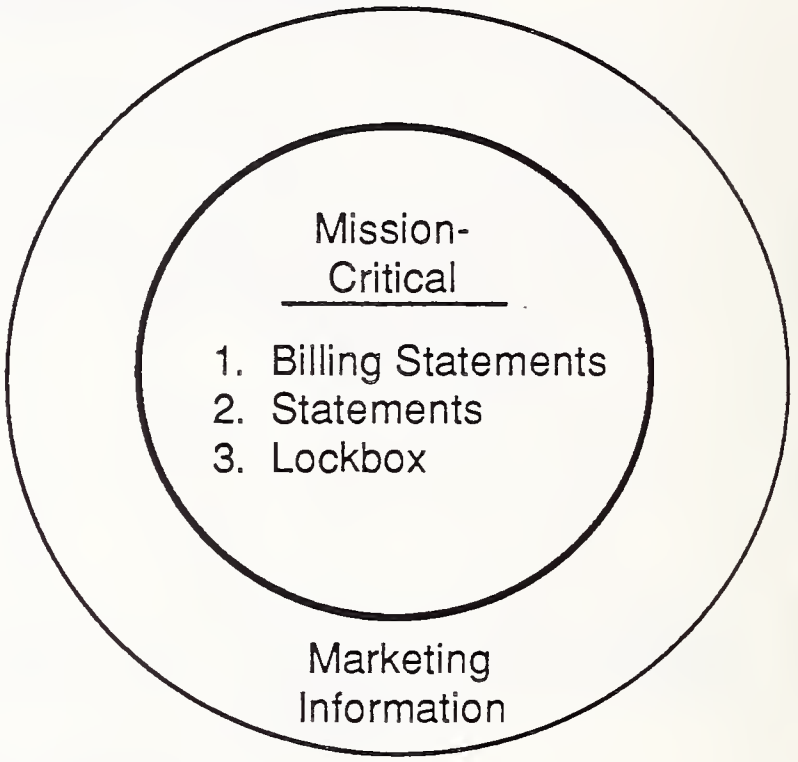
Opportunity Attractiveness by Target Audience

Type of Service	Target Audience					Total
	Owners	Employees	Customers	Suppliers	Internal Efficiency	
			Business | Consumer			
A. Basic						
• Cards						
- Bank Credit			18			18
- ATM			18			18
• Customer Acct. Statements			20			20
• Customer Transaction Notices			2			2
• Coupon Books			10			10
• Proxies			4			4
• Year-End Reporting			40			40
Subtotal			112			112
B. Enhanced						
Retail Lockbox Services for:						
• Loans					20	20
• Credit Cards					10	10
Subtotal					30	30
Total			112		30	142

6. Overall: A strong industry for basic services driven by higher than average outsourcing tendencies. Limited enhanced opportunities. A major "Today Market"

C. Retail Industry Summary

1. Segments studied:
   - Department and specialty stores
   - Oil company retail operations
   - Supermarkets



2. Applications considered:

3. Basic opportunities are very weak in both quantity and attractiveness

Basic Service Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem =	Attractiveness Rating Value
Statement printing and mailing	253	2	1	1	2
Card issuance	150	2	1	1	2
Basic Total	403				4

4. There is more opportunity in enhanced services

Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem =	Attractiveness Rating Value
EDI	340	3	5	5	75
Retail lockbox	1,350	5	2	1	10
Customer purchase profiles	54	1	3	1	3
Enhanced Total	1,744				88

C. Retail Industry Summary

5. The more attractive (enhanced) services target suppliers and provide internal efficiency

Opportunity Attractiveness by Target Audience

Type of Service	Target Audience					
	Owners	Employees	Customers	Suppliers	Internal Efficiency	Total
			Business / Consumer			
A. Basic			Statement printing/mailing (2); Card issuance (2)			
Subtotal			4			4
B. Enhanced			Customer purchase profiles (3)	EDI (75)	Retail lockbox (10)	
Subtotal			3	75	10	88
Total			7	75	10	92

6. Overall: Focus on this market will be driven more by the attractiveness of cross-industry services (e.g. EDI and lockbox) than by its own inherent merit

D. State and Local Government Summary

1. Segments studied:

- States (CA-large, bellwether, CT-representative)
- Cities and counties ≥ 100,000 population (Eugene, OR; Austin, TX; Santa Clara, CA)

2. Applications considered: These are highly fragmented organizational environments where everything is considered "mission critical"

State Applications Selected (#)	Local Government Applications Selected (#)
Dept. of revenue (2)	Assessor (4)
Employment development (4)	Traffic citations (5)
Board of equalization (2)	Voter registration (2)
DMV (5)	Social services (1)
Controller's office (6)	Collections (2)

3. Basic opportunities attractiveness is overstated due to many small fragmented applications. They typically have low and infrequent mailing volumes, and users show strong in-house tendencies (especially in state governments). Local government opportunities are more attractive than state ones.

Basic Services Opportunities

Type	Size ($ Millions)	Relative Size	X Willingness to Outsource	X Level of Pain or Problem	= Attractiveness Rating Value
State govt.					
Dept. of revenue	43	1	1	1	1
Employ devel.	62	1	1	1	1
Bd of equal.	28	1	1	1	1
DMV	102	2	1	1	2
Controller	67	1	1	1	1
Subtotal	302				6
Local govt.					
Property tax	107	2	1	1	2
Traffic citation	23	1	4	3	12
Social services	20	1	2	2	4
Collections	55	1	4	2	8
Voter regist	155	2	2	1	4
Subtotal	360				30
Total	662				36

D. State and Local Government Summary

4. Enhanced applications are a "stretch"—few in number and must be sold across multiple departments and agencies (questionable doability).

Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Address checker (3 depts.)								
Total/average checker	45	1		3.5		3.5		12
OCR/bar code** (9 depts.)								
Total/average OCR	174	2		2		2		8
Total enhanced	219							20

5. Basic opportunities target consumers, while enhanced opportunities deliver internal efficiency.

Opportunity Attractiveness by Target Audience

Type of Service	Target Audience: Owners	Employees	Customers: Business	Customers: Consumer	Suppliers	Internal Efficiency	Total
A. Basic				Collections (8); Social services (4); Voter registration (4); Traffic tickets (12)			
			Other (2)	Other (6)			
Subtotal			(2)	(34)			(36)
B. Enhanced						Address checker (12); OCR/barcode (8)	
Subtotal						(20)	(20)
Total			(2)	(34)		(20)	(56)

6. Overall: While state and local government poses obstacles for penetration on a broad front, niche opportunities like traffic citations may be worth pursuing. Enhanced opportunities are more questionable—this is not a pioneering industry.

E. Education Industry Summary

1. Segments studied (three enrollment size ranges):

- Public colleges (2 and 4 year)
- Private colleges (2 and 4 year)
- Professional and technical schools

2. Applications considered: this is a highly fragmented organizational environment where all applications are considered mission critical

- Admissions (4 applications)
- Registrar (7)
- Bursar (4)
- Alumni (6)
- Development (3)
- Ticket sales (1)
- Noncredit education (2)

3. Basic service opportunity attractiveness is overstated due to many small fragmented applications. Only one application area is substantial (alumni). The rest have small, infrequent mailing volumes.

Basic Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Admissions	23	1		1		1		1
Registrar	42	1		1		1		1
Bursar	10	1		1		1		1
Financial aid	28	1		1		1		1
Alumni	182	2		5		1		10
Development	1	1		1		4		4
Ticket sales	9	1		1		1		1
Total basic	295							20

4. No enhanced applications were found in this market due to a potent combination of lack of opportunity and lack of user interest.

E. Education Industry Summary

5. Virtually all education applications can be constructed to address consumers (students).

Opportunity Attractiveness by Target Audience

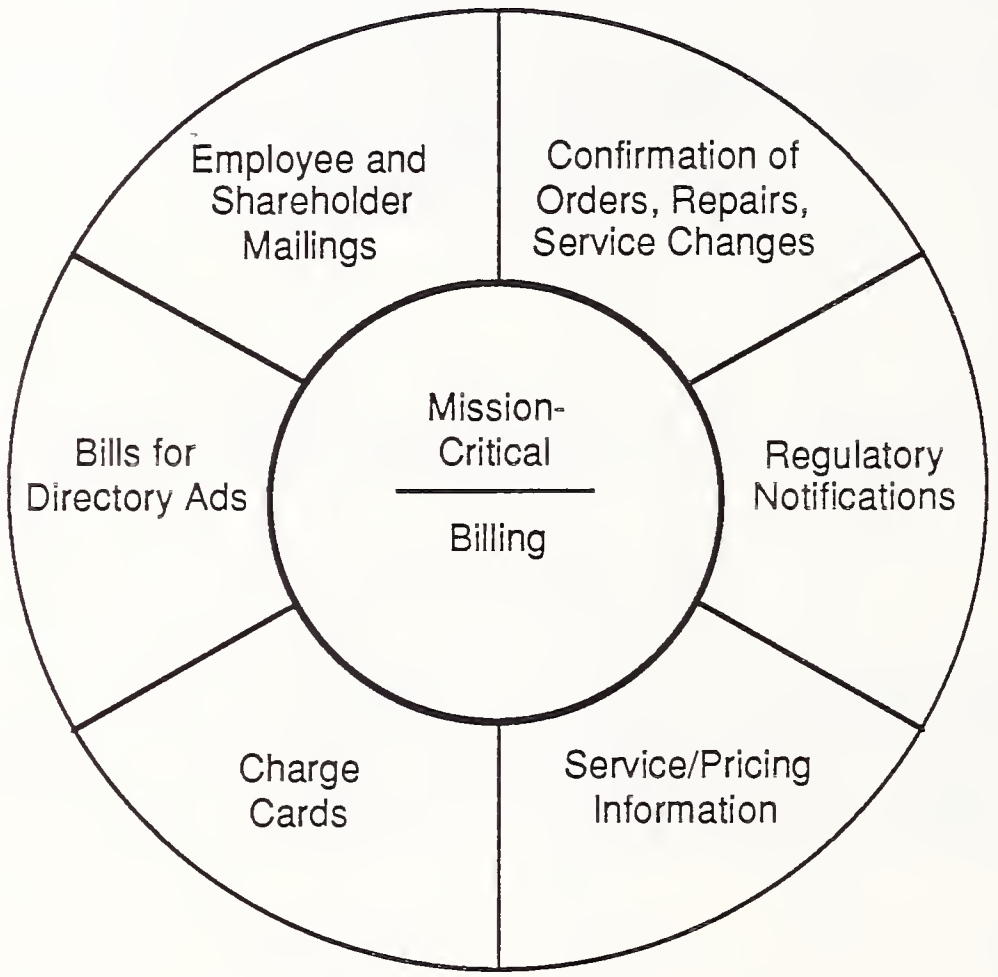
Type of Service	Target Audience					Total
	Owners	Employees	Customers	Suppliers	Internal Efficiency	
			Business / Consumer			
A. Basic			Registrar (1) Bursar (1) Financial Aid (1) Admissions (1) Alumni (10) Development (4) Ticket Sales (2)			
Subtotal			(20)			(20)
B. Enhanced						
Total						(20)

6. Overall: Small fragmented basic applications spread across low and stagnant budget departments diminish the attractiveness of this market. Administrative support services are not at the core of educational missions. A tough market to grow and make money in.

F. Telecommunications Industry Summary

1. Segments studied:
   - Regional bell holding and operating companies
   - Cellular companies
   - Cable TV companies
   - Value added data networks

2. Applications considered:



3. Only one basic service opportunity consistently surfaced among the telecom industry sectors. Phone companies (being tradition bound) process statements inhouse, while cable and cellular typically outsource to established vendors.

Basic Services Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem =	Attractiveness Rating Value
Billing	334	3	2	2	12
Total Basic	334				12

F. Telecommunications Industry Summary

4. Enhanced opportunities are logical extensions of the basic billing applications. Market needs are in two areas: (1) improved collections cash flow and (2) better service to business customers via EDI statements.

Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Bill/Collect	500	3		3		2		18
EFT/ACH Billing	417	3		4		2		24
EDI Corp. Billing	60	1		5		2		10
Total Enhanced	977							52

5. Telecom opportunities exclusively target customers, especially consumers

Opportunity Attractiveness by Target Audience

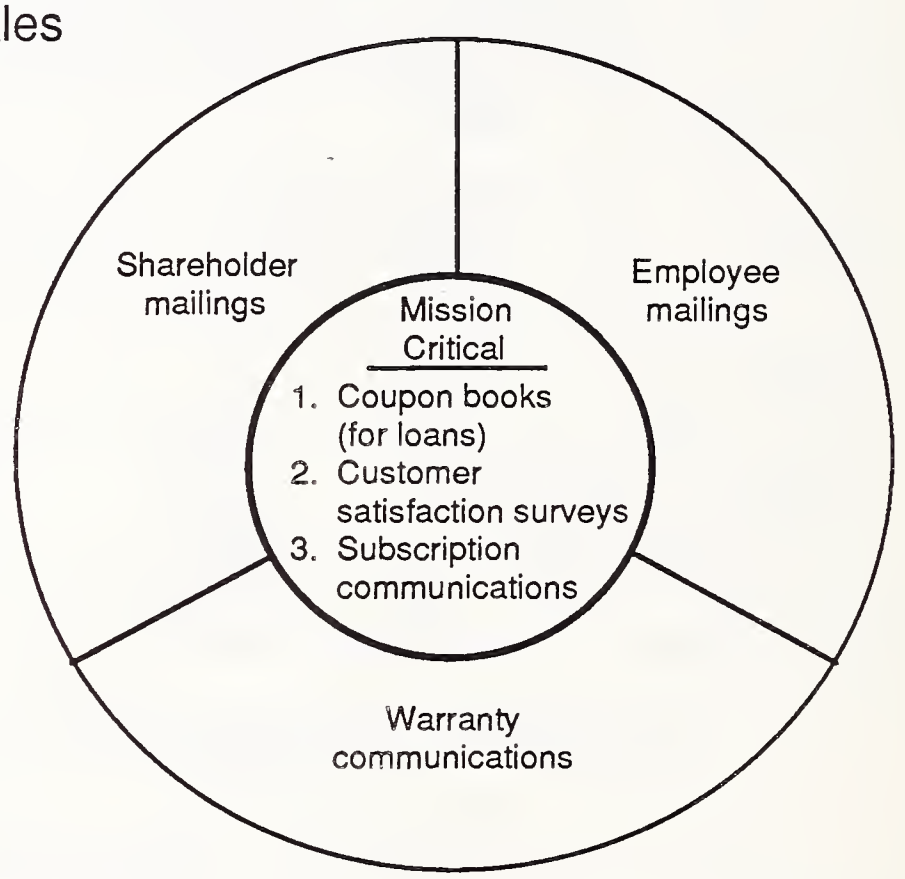
Type of Service	Target Audience: Owners	Employees	Customers: Business	Customers: Consumer	Suppliers	Internal Efficiency	Total
A. Basic				Bills (12)			
Subtotal				(12)			(12)
B. Enhanced			EDI (10)	EFT/ACH (24); Bill/Collect (18)			
Subtotal			(10)	(42)			(52)
Total			(10)	(54)			(64)

6. Overall: The combination of highly focused and related opportunities, combined with a limited set of large prospects makes telecom a moderately attractive vertical market. EFT/ACH may be less attractive than originally thought.

G. Manufacturing Industry Summary

1. Segments studied: After many discards, INPUT focused on:
   - Publications (periodicals)
   - Machinery, especially computers
   - Electrical appliances and electronic equipment
   - Transportation (automobiles)
   - Instruments and measuring devices
   - All firms ≥ $50 million sales

2. Applications considered:



3. Basic applications in manufacturing are limited by the infrequent need for high quality variable imaging. It is mostly a business-to-business communications environment. Not surprisingly, the most promising (see below) are consumer oriented. Mailing quantities are typically small and/or infrequent. They exist in only a few market segments.

Basic Service Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem =	Attractiveness Rating Value
Coupon books	15	1	3	1	3
Customer surveys (mail only)	9	1	4	2	8
Total	24				11

G. Manufacturing Industry Summary

4. Enhanced opportunities in manufacturing are substantial. "Back-end" collection and EFT/ACH services could grow out of basic statement mailings. EDI will eventually replace most business-to-business communications.

Enhanced Service Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem =	Attractiveness Rating Value
Bill/collect	63	1	1	2	2
EFT/ACH	120	2	4	2	16
Customer surveys (mail and report)	45	1	4	2	8
EDI	1,110	5	5	5 2	125
Total	1,338				151

5. EDI targets business audiences, while basic services and their enhanced extensions target consumers.

Opportunity Attractiveness by Target Audience

Type of Service	Target Audience: Owners	Employees	Customers: Business	Customers: Consumer	Suppliers	Internal Efficiency	Total
A. Basic				Customer surveys (mail only) (8); Coupon books (3)			
Subtotal				(11)			(11)
B. Enhanced			EDI (125)	EFT/ACH (16); Customer surveys (mail and report) (8); Bill/collect (2)			
Subtotal			(125)	(26)			(151)
Total			(125)	(37)			(162)

6. Overall: Ignore the manufacturing industry unless EDI becomes a Moore BCS priority. Exception: niche opportunity in coupon books and customer surveys with auto makers.

H. Wholesale Industry Summary

1. Segments studied:

- Market segments targeted
  - Furniture*
  - Home furnishings*
  - Office equipment
  - Medical equipment and supplies*
  - Electrical appliances and electronic equipment*
  - Hardware*
  - Heating and air conditioning*
  - Sporting goods
  - Toys and hobby goods*
  - Stationery and office supplies
  - Clothing*
  - Packaged frozen food*
  - Distilled beverages*
- Size of companies
  - Over $50 million, under $500 million

* Indicates an interview was accomplished in this segment

2. Applications considered:

3. Basic application opportunities—none found

- All business-to-business communications in transition to EDI
- "Do you have any laser printers? . . . What's a laser printer . . .?!

4. Substantial enhanced application opportunity (EDI) exists in mission critical areas like purchasing and invoicing.

Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem =	Attractiveness Rating Value
EDI	397	3	5	5	75
Total	397				75

H. Wholesale Industry Summary

5. Wholesale market opportunities target business audiences only.

Opportunity Attractiveness by Target Audience

Type of Service	Target Audience					Total
	Owners	Employees	Customers	Suppliers	Internal Efficiency	
			Business | Consumer			
A. Basic						
Subtotal						
B. Enhanced			EDI (75)			(75)
Subtotal			(75)			(75)
Total			(75)			(75)

6. Overall: Forget the wholesale industry unless EDI becomes a Moore BCS priority.

I. Transportation Industry Summary

1. Segments studied:
   - Airline/Air Cargo
   - Trucking
   - Railroad
   - Shipping
   - City transit authorities

2. Applications considered:

3. Basic service opportunities exist in the transportation industry sector only where consumers are involved—primarily the airlines.

Basic Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Airline tickets	35.3	1		1		1		1
Frequent flyer statements	20.3	1		4		2		8
Frequent flyer cards	3.6	1		4		2		8
City transit monthly tickets	0.8	1		1		1		1
Total basic	60.0							18

I. Transportation Industry Summary

4. Enhanced opportunities are limited to EDI plus one niche application—providing turnkey frequent flyer programs to smaller airlines.

Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Frequent flyer program management	240	2		2		2		8
EDI	113	2		5		5		50
Total enhanced	353							58

5. Basic opportunities address consumers and enhanced opportunities address businesses.

Opportunity Attractiveness by Target Audience

Type of Service	Target Audience: Owners	Employees	Customers: Business	Customers: Consumer	Suppliers	Internal Efficiency	Total
A. Basic				Airline tickets (1) Frequent flyer statements (8) Frequent flyer cards (8) City transit monthly tickets (1)			
Subtotal				(18)			
B. Enhanced			Frequent flyer program management (8) EDI (50)				
Subtotal			(58)				(18)
Total			(58)	(18)			(76)

6. Overall: Transportation is an EDI opportunity market—otherwise, the only niche opportunity is airline frequent flyer programs.

J. Health Care Industry Summary

1. Segments studied:
   - Hospital groups
   - Medical/dental clinics
   - Nursing/extended care services
   - Medical labs
   - ~~City transit authorites~~
   - All firms ≥ $50 million revenue

2. Applications considered:

3. Billing is the only substantial basic application in this industry.

Basic Service Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem	Attractiveness Rating Value
Billing	209	2	1	1	2
Total Basic	209				2

4. Enhanced opportunities are two extensions of basic billing services—collections and EDI.

Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem	Attractiveness Rating Value
EDI Billing	276	2	4	4	32
Bill/Collect	316	3	1	2	6
Total Enhanced	592				38

J. Health Care Industry Summary

5. The majority of health care billing and collection activity involves medical businesses—not consumers.

Opportunity Attractiveness by Target Audience

Type of Service	Target Audience					
	Owners	Employees	Customers	Suppliers	Internal Efficiency	Total
			Business / Consumer			
A. Basic			Bills (2)			
Subtotal			(2)			(2)
B. Enhanced			EDI (32); Bill/ Collect (6)			
Subtotal			(38)			(38)
Total			(40)			(40)

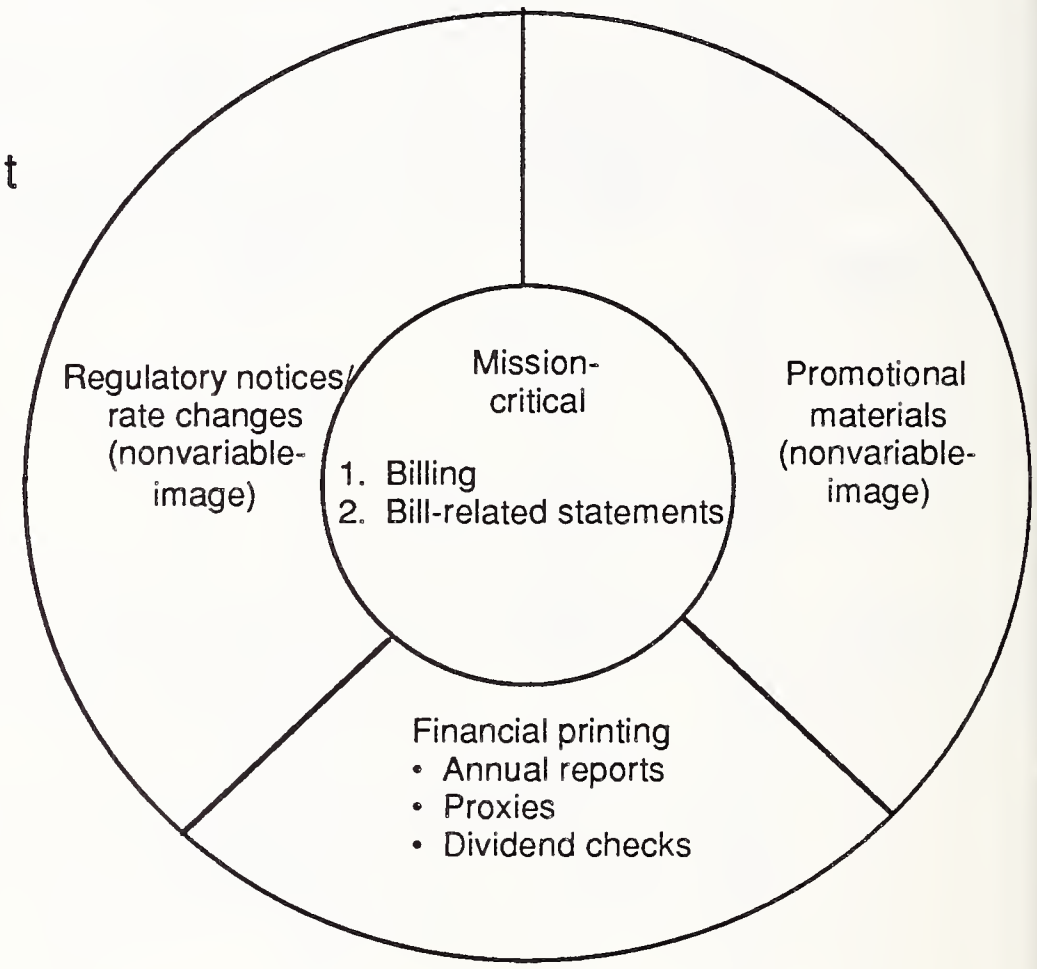
Note: Bills and Billing/Collections are allocated here to the Business Customer segment, where the higher dollar volumes are found.

6. Overall: target health care as an EDI opportunity only—the other applications are too small and specialized (i.e., not leverageable to or from other industries).

K. Utilities Industry Summary

1. Segments studied:
   - Electric companies
   - Combined Gas and Electric companies

2. Applications considered:
   - Few to choose from
   - Low variable-image content



3. Basic service opportunities are limited by strong in-house commitment to specialized billing systems and expertise in dealing with regulatory bodies.

Basic Service Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractivenss Rating Value
Statements	480.2	3		1		1		3
Statement-related	44.0	1		1		1		1
Financial dividend checks	29.4	1		3		2		6
Total	554.0							10

K. Utilities Industry Summary

4. No significant enhanced service opportunities surfaced in this market, probably due to the nature of the industry—low-growth, undynamic, no pressure for change or risk-taking.

5. Basic applications target consumer audiences.

Opportunity Attractiveness Rating by Target Audience

Type of Service	Target Audience					
	Owners	Employees	Customers	Suppliers	Internal Efficiency	Total
			Business | Consumer			
A. Basic			Statement (3) Statement-related (1) Dividend checks (6)			
Subtotal			(10)			
B. Enhanced						
Subtotal						
Total			(10)			

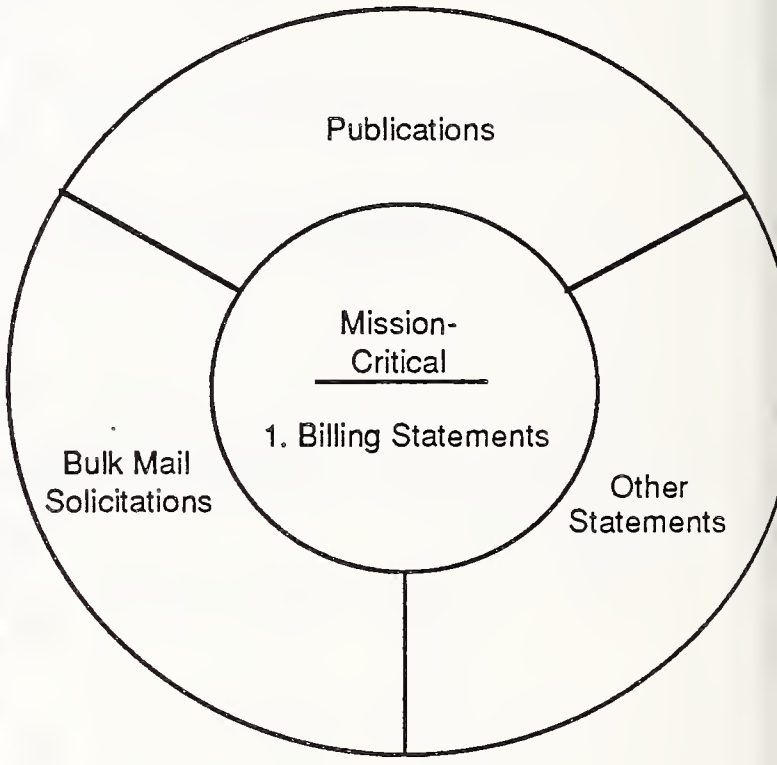
6. Overall: Let a sleeping dog lie...

L. Services/Other Industry Summary

1. Segments studied (After many discards):

SIC	Industry/Business Opportunity	
A	Agriculture, forestry and fishing	(No targets identified)
B	Construction	(No targets identified)
65	Real estate *Property management services*	
70	Hotels and other lodging places *Frequent Traveler programs*	
73	Business services *Equipment renting/leasing*	
75	Auto repair, services and parking *Vehicle rental/leasing*	
79	Amusement and recreation services	(No viable applications)
81	Legal	(No targets identified)
86	Membership organizations *Membership renewal billings*	
87	Engineering and management services	(No viable applications)

2. Applications considered:



3. Three small basic opportunities were identified.

Basic Services Opportunities

Type	Size ($ Millions)	Relative Size	X	Willingness to Outsource	X	Level of Pain or Problem	=	Attractiveness Rating Value
Frequent Traveller Program	36	1		2		1		2
Equipment Leasing	48	1		1		1		1
Vehicle Leasing	30	1		1		1		1
Total	114							4

L. Services/Other Industry Summary

4. Two substantial enhanced opportunities were identifed. Both have many small accounts as a drawback.

Enhanced Services Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem =	Attractiveness Rating Value
Property Management	667	3	4	1	12
Membership Renewals Billing	540	3	4	2	24
Total	1,207				36

5. All applications target customers, mostly consumers.

Opportunity Attractiveness by Target Audience

Type of Service	Target Audience: Owners	Employees	Customers: Business	Customers: Consumer	Suppliers	Internal Efficiency	Total
A. Basic			Equip. Leasing (1) Vehicle Leasing (1)	Frequent Traveler Programs (2)			
Subtotal			2	2			4
B. Enhanced			Property (12)	Management Membership Renewals Billing (24)			
Subtotal				24			36
Total			2 (12)	26			40

6. Overall: Strictly a hunting ground for niche opportunities. The two enhanced ones appear worth consideration.

M. Federal Government Summary

1. Segments studied:
   - Civilian agencies (7)
   - Defense agencies (1)
   - Congressional agencies (2)

2. Applications considered: The "mission-critical" concept does not apply here for the same reasons given in the state and local government and education summaries. The greatest interest across the ten agencies was in:
   - Procurement (RFP) preparation
   - Market surveys
   - Publication subscription letters
   - Employee tax forms (~~1099~~) W2
   - Employee benefit mailings

3. The attractiveness of basic opportunities shown below is individually overstated due to the large number of small sized applications. Logic suggests some large basic opportunities exist, but none were found. This is a market of many diverse buyers and opportunities with much higher than average willingness to outsource. Because of this, the high total attractiveness rating is probably within reason. However, capitalizing on the opportunity requires unique sales expertise, patience, and willingness to take risks.

Basic Service Opportunities

Type	Size ($ Millions)	Relative Size X	Willingness to Outsource X	Level of Pain or Problem	= Attractiveness Rating Value
Procurement	8	1	5	3	15
Market Surveys	7	1	2	2	4
Subscription Letters	14	1	4	3	12
Employee Tax Forms	1	1	5	3	15
Benefits Mailings	2	1	5	3	15
Total	32				61

M. Federal Government Summary

4. No clear and easily measured enhanced opportunities were found. Logic suggests they do exist and/or could be developed with a patient strategic sales effort. Several possibilities are discussed in the detailed report.

5. The federal applications covered a more diverse group of target audiences than any other vertical market.

Opportunity Attractiveness by Target Audience

Type of Service	Target Audience: Congress	Employees	Customers		Suppliers	Internal Efficiency	Total
			Business	Consumer			
A. Basic		Tax forms 15 Benefit mailings 15	Subscription letters 6	6 Market surveys 4	Procurement 15		
Subtotal		30	6	10	15		61
B. Enhanced None identified and quantified							
Total		30	6	10	15		61

6. Overall: Pursuing the federal government market is a separate issue due to the uniqueness of opportunities, sales approach, and business risk/reward trade-offs involved. It is a big enough opportunity to study further.

III. Basic Service Opportunities

A. Basic Services—General Findings

1. Most in-house variable image printing capabilities are relatively new.

2. The information services (IS) function is increasingly the controlling organization for variable imaging operations.

3. In-house competition is very strong because:

- There are few perceived problems—people are happy with
  - Quality
  - Schedule performance
  - Cost
- Fear of outsourcing
  - Loss of control
  - Data security
  - Reluctance to rescind prior decisions

4. Today's robust information services markets were created because the opposite of the above factors prevailed.

5. In-house users are planning new equipment acquisitions to expand capacity and/or capabilities.

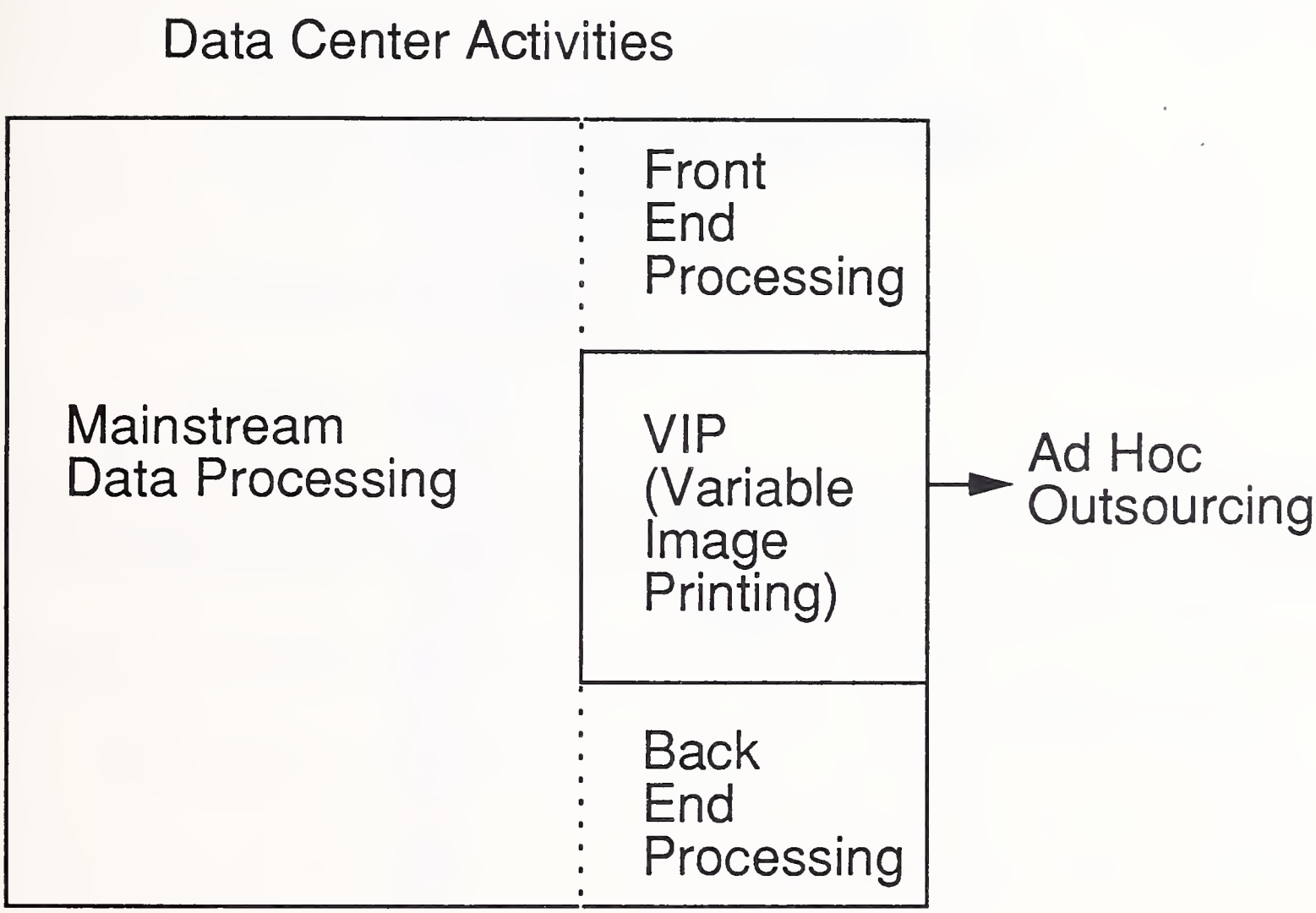
6. No other significant competition was identified.

7. There is no talk or evidence of a variable imaging trend to parallel the hot topic of DP outsourcing.

8. The DP outsourcing trend threatens the variable image printing (VIP) services business.

9. Prospects who do outsource do so with either a few or most variable printing jobs—no middle ground because of need to justify having or not having imaging facilities.

The Outsourcing Threat



Today: VIP outsourced primarily on ad hoc basis

Future threat: DP outsourcing firm absorbs total operation, including all VIP, leaving none for VIP service specialists

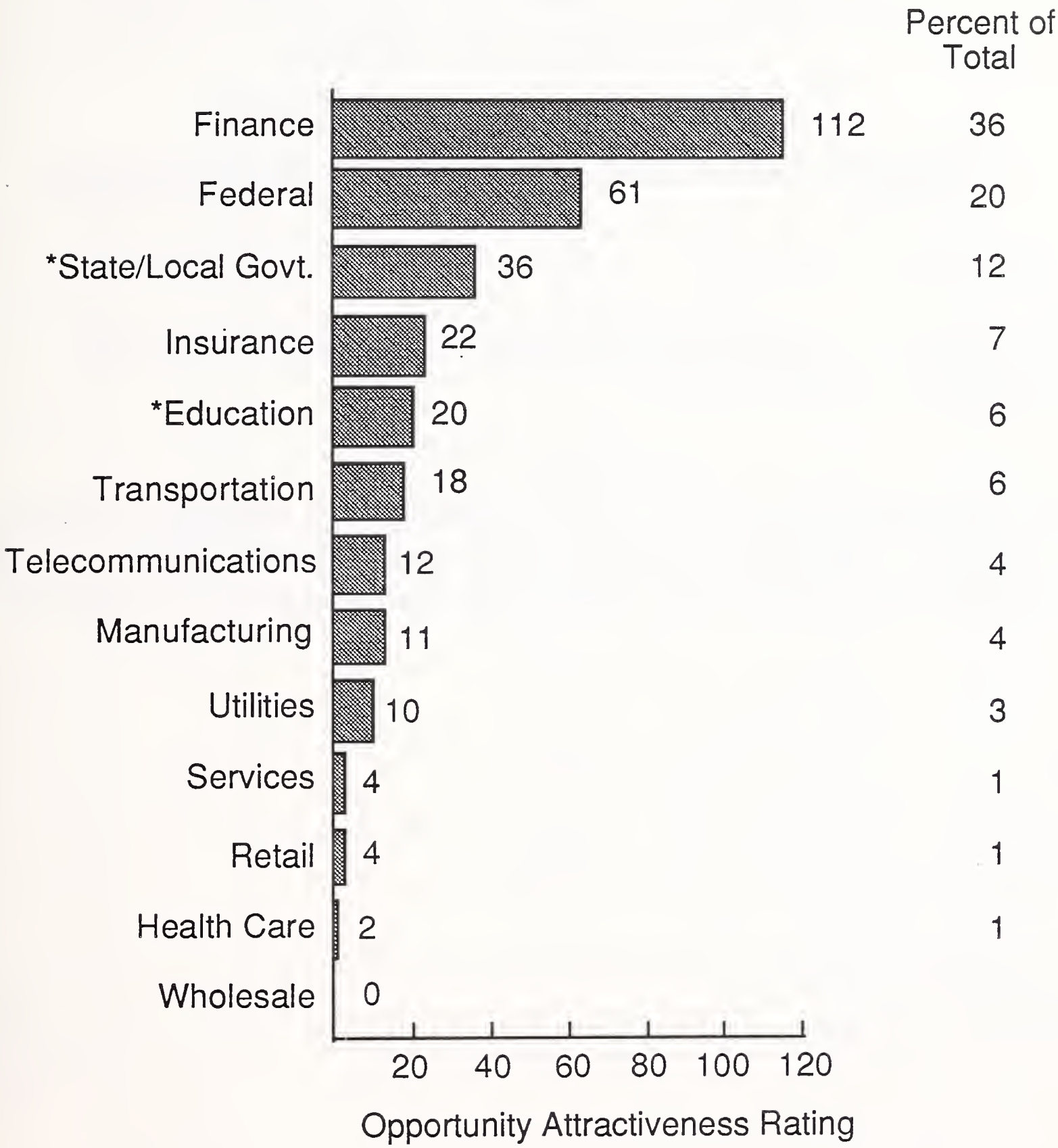
B. Distribution of Basic Opportunities by Industry

1. Finance dominates, driven by large volume of statements, cards, and tax reporting

2. Some industries are highly fragmented, with many small applications—total attractiveness is likely overstated for:

- State/local government
- Education

Basic Services Opportunity Attractiveness



*Attractiveness overstated due to many small applications

C. Distribution of Basic Opportunities by Target Audience

1. Nearly all basic service opportunities are mailings targeted to consumers.

2. Federal is the one market with a wide variety of targets for basic services, and the only one with significant target audiences other than customers (business or consumer).

Basic Services Opportunity Attractiveness by Target Audience

	Target Audience						
	Owners	Employees	Customers		Suppliers	Internal Efficiency	Total
			Business	Consumer			
		Federal 30	Health care 2 Services 2 State/local govt. 2 Federal 6	Finance 112 Education 10 State/local govt. 34 Insurance 22 Transport. 18 Telecomm. 12 Manufac 11 Utilities 10 Retail 4 Services 2 Federal 10	Federal 15		
Total		30	12	245	15		302
Percent of total		10	4	81	5		100

D. Where Are the Biggest Basic Service Applications?

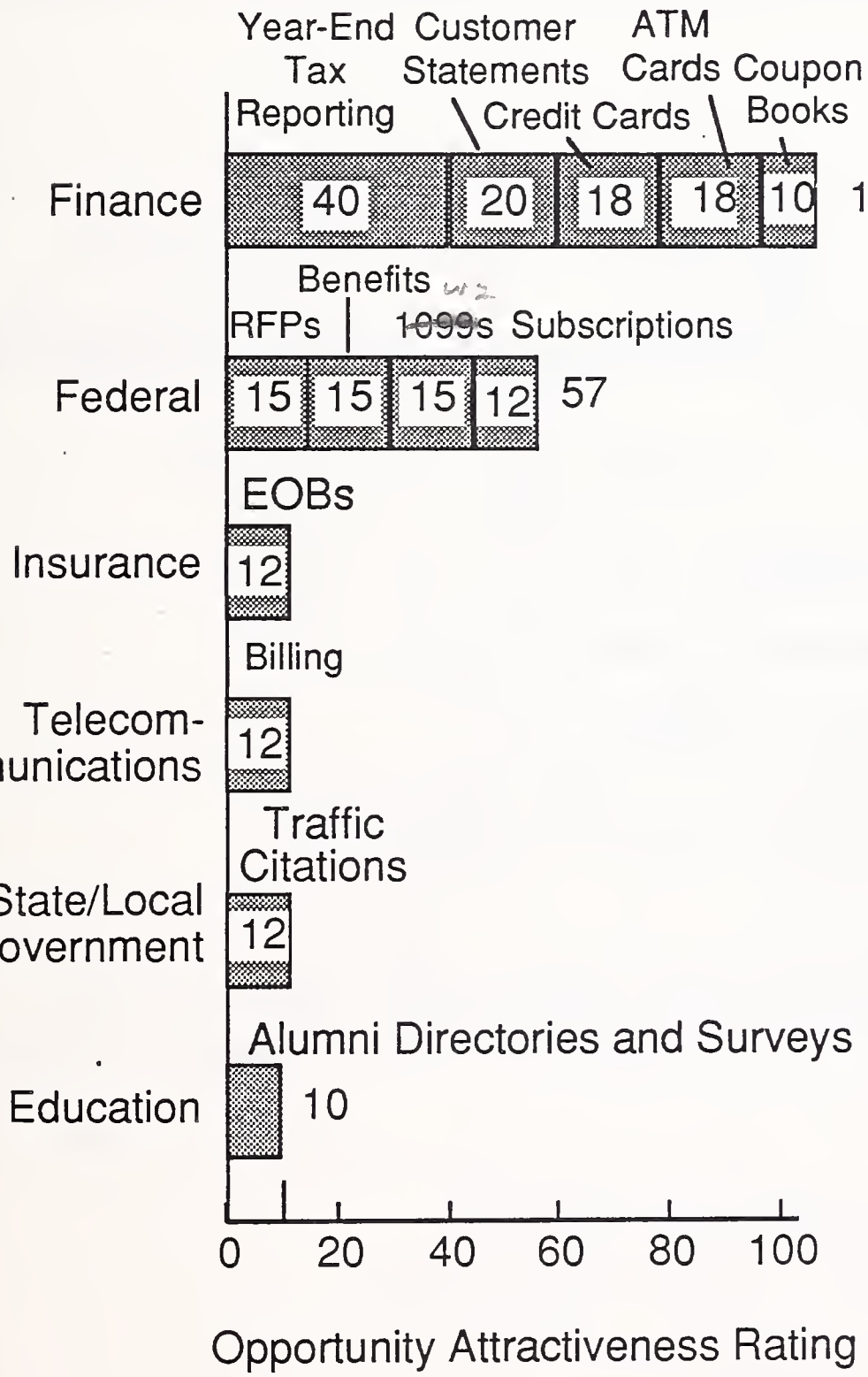
1. Single largest basic application is year-end tax reporting.

2. Top four applications are all in finance.

3. While federal looks attractive, all applications are very small (avg. $6 million), so attractiveness rating may overstate importance of this market.

4. Remaining large applications are industry-specific niches.

Basic Services Applications (≥10 Rating)



E. Where Are the Cross-Industry Basic Opportunities?

1. Basic cross-industry opportunities are in two related areas:

- Statements
- Cards

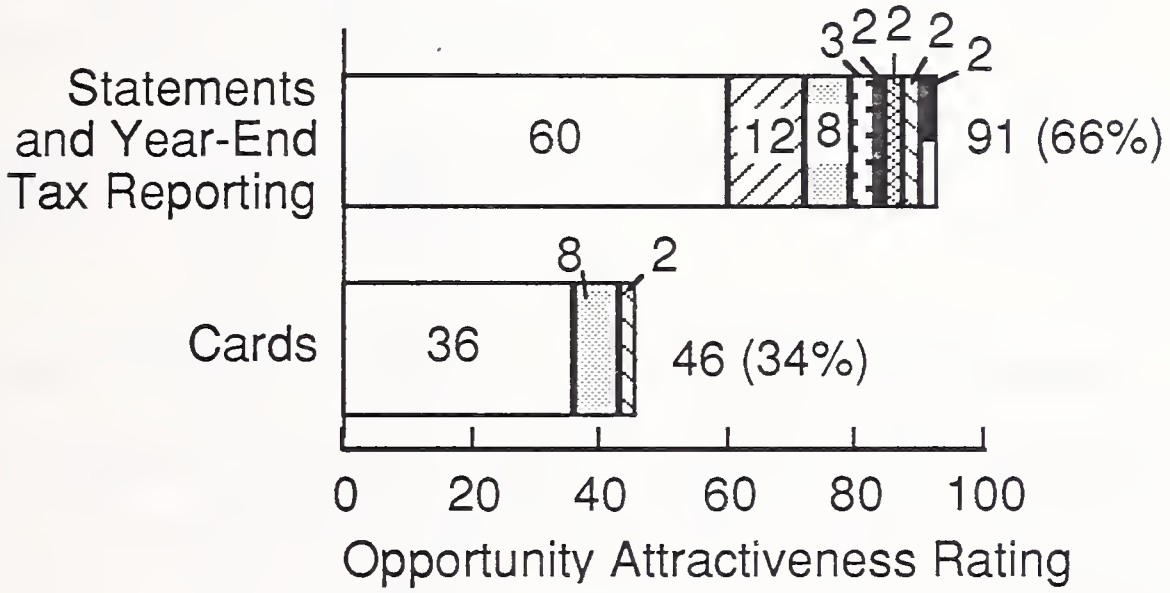
2. Most statements are financially oriented, no matter what the originating industry:

- Bank accounts
- Brokerage accounts
- Credit card accounts (bank, retail)
- Other retail billings (utilities, etc.)
- Other misc (frequent traveler, etc.)

3. Most statement-generated consumer accounts are linked to some type of transaction or identification card:

- Personal checks
- ATM and check guarantee cards
- Credit cards (bank, retail, telecomm)
- Frequent traveler cards

Basic Cross-Industry Opportunities



- Manufacturing
- Insurance
- Wholesale
- Retail
- Transportation
- Health Care
- Telecommunications
- Services
- Finance
- Utilities

Note: Percentages are percent of total

F. Statement Services

1. No business-targeted statements identified as significant opportunities. Characteristics opposite from consumer-targeted statements

	Target Audience	
	Business	Consumer
• Statement volume	Low	High
• Size/complexity of statements	High	Low
• Used as marketing vehicle	No	Yes
• Frequency of outsourcing	Very Low	Medium
• Replaceable via EDI	Yes	No

2. Statement processing is good lead into other consumer oriented basic and enhanced opportunities—especially in retail area

- Card issuance
- Lockbox
- Customer purchase profiles

F. Statement Services

3. Volume of consumer-targeted statements will continue to increase:

- Population/demographic factors
- No feasible electronic replacement
- Major avenue for direct mail advertising

4. Cannot avoid year-end tax business if targeting monthly statement business

5. Most statements are commodity business:

- Simple laser printing job
- Fixed set of inserts in each statement

6. Major outsourcing barriers:

- Cost (key issue in a commodity service)
- Control
- Schedule/turnaround time

7. Suggested opportunity/focus:

- High-margin businesses (e.g., specialty retailing) where advertising is important and Moore's flexibility in stuffing/inserting would appeal to marketing management
- Areas where there is a strong chance of selling other basic and enhanced services (see individual vertical market reports)

G. Card Services Opportunity

1. Focus is on card issuance only—payments processing covered under enhanced service opportunities

Card

Potentially Attractive Market Segments

Vertical Market/Application	Size ($ Millions)	Attr Score
Financial Institutions		
• Bank credit cards	136	18
• ATM cards	200	18
Retail Firms		
• Department/specialty store credit cards	150	2
Insurance		
• Automobile insurance ID cards	56	2
Transportation		
• Frequent flyer program ID cards	4	8

G. Card Services Opportunity

Card

Unattractive Market Segments
(per INPUT analysis)

Vertical Market/Application
Retail • Oil companies • Supermarkets State/Local Government • Electronic benefit transfer (EBT)

2. BCS market managers more positive than INPUT.on supermarket and EBT opportunities (further study may be warranted)

G. Card Services Opportunity

3. Three categories of opportunity, based on production cycle:

- Mass (ad hoc)
- Periodic (monthly)
- Continuous (daily)

4. Critical card user issues

- Mass/periodic
  - Ability to handle large volumes
  - Turnaround time
- Continuous
  - Turnaround time

5. Significant differences by industry and application (see opposite page)

Differences driven by three factors

- Extent of application outsourcing
- Expiration renewal characteristics of card
- Extent of mass changes in cardholder base

G. Card Services Opportunity

	Frequency of Issue			Issuing Organization	
	Cont	Period	Mass	Direct	Via Processor
ATM	X	F	X	X	X
Bank Credit	X	X	X	X	X
Retail Credit	X	F		X	X
Auto ID	X	X		X	
Frequent Flyer ID	X	X			X

X = Current pattern

F = Future pattern

6. For credit card issuance, since there is significant concentration of business at the credit card processors (major banks, FDR, FFMC, etc.), the number of prospects is much smaller than the number of card-issuing banks and retailers.

7. Suggested opportunity/focus:

- Large retailers that are converting to standard mag-stripe cards with expiration dates
- Banks that are converting from undated to expiration-dated ATM cards
- Large credit card processors

H. Basic Services Conclusions

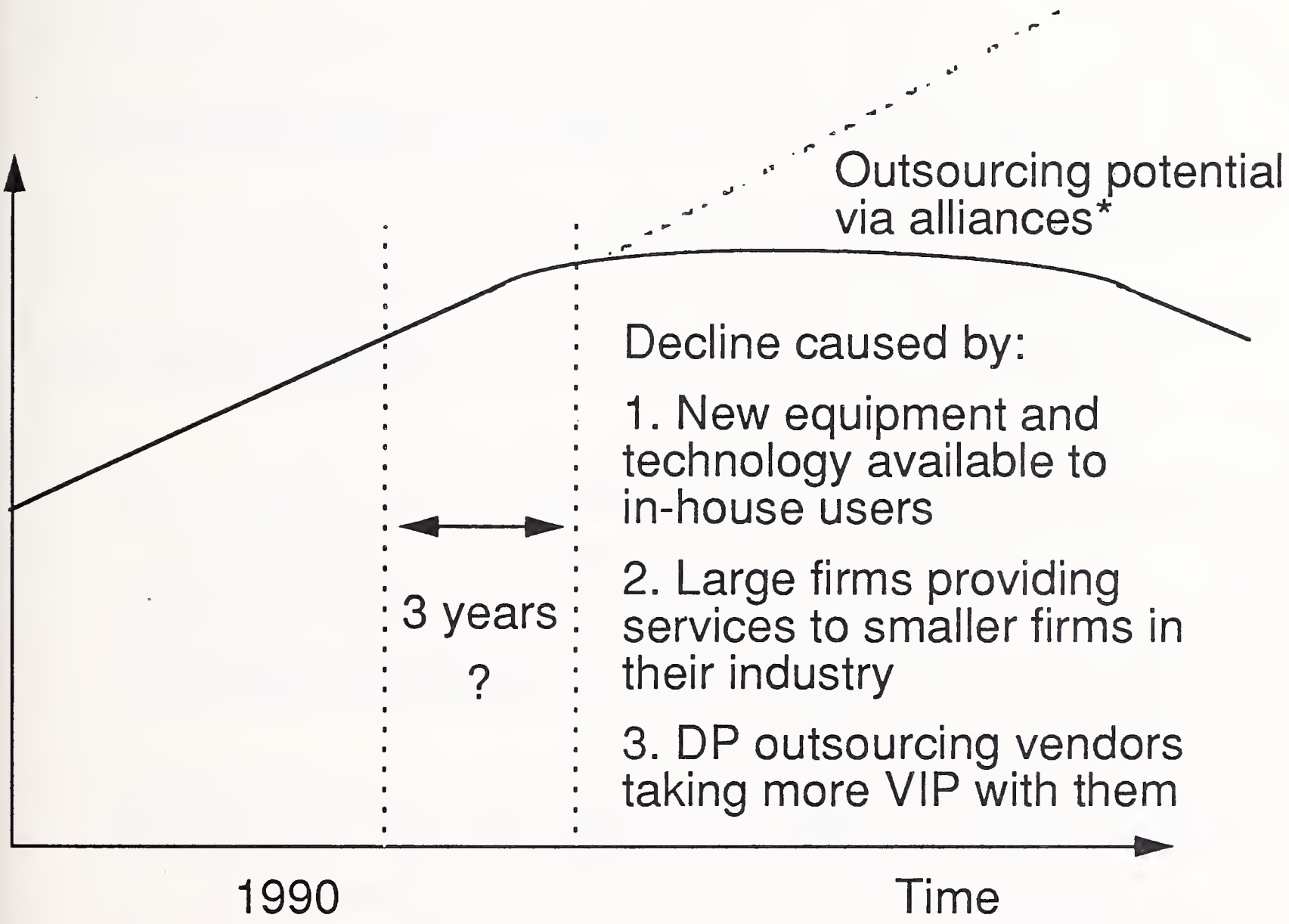
1. Pros:

- The market is real—ink on paper is here to stay.
- Good opportunities exist—mission critical and non-mission critical.
- Moore BCS appears to be the dominant U.S. supplier.
- The anticipated proliferation of new variable imaging equipment and technology offerings may overwhelm some users to the point of outsourcing.

2. Cons:

- In-house competition is intense and will increase.
- DP outsourcing will siphon off opportunities otherwise available to Moore BCS.
- Key vertical markets (e.g., finance) have a pattern of large firms providing services to smaller firms in their industry, which creates more competition for BCS.
- The outside available market for variable imaging will peak out in the near future.
- Moore BCS will consistently be at a cost disadvantage on a job-by-job basis because customers cannot eliminate internal costs when they outsource the work.
- Few opportunities to "sell high"—in the context of the customer's IS budget, VIP costs are seldom a strategic issue.

Future of Basic Services


Outsourcing potential via alliances*
Decline caused by:
1. New equipment and technology available to in-house users
2. Large firms providing services to smaller firms in their industry
3. DP outsourcing vendors taking more VIP with them
3 years
?
1990
Time

*Driven by general DP outsourcing trend (alliance opportunity) and user confusion over new equipment and technology offerings (sell direct)

I. Basic Services Recommendations

1. Tactical recommendations:

- Target companies in rapidly changing circumstances
  - Equipment changes
  - Merger/acquisition situations
  - Culture/attitude changes (e.g., re outsourcing)

- Develop a consultive/solution-oriented sales and services approach

- Don't try to "sell high" unless you have something strategic to offer (e.g., an enhanced service)

I. Basic Services Recommendations

2. Strategic recommendations:

- Focus on finance industry.
  - Team with insiders to penetrate this parochial market.
  - Find a creative way to increase non-seasonal workloads (e.g., sell near marginal cost to attract new applications).

- Emphasize statement and card processing services.

- Consider niche opportunities in alumni directories/surveys and traffic citations.

- Avoid getting hooked on customer overload business/commodity services—even if making quota.

- Keep sales pressure on mission critical applications while building client relationship and trust on peripheral project type jobs.

- Offer transition plans to get mission critical applications (absorb customer's equipment, personnel, etc.)—facility management.

I. Basic Services Recommendations

2. Strategic recommendations (Cont.):

- Play to BCS strengths and uniqueness—look for opportunities for:
  - Matched mailers
  - Variable inserts
  - Where cost issues become diluted. . .and you're doing more than just replacing a customer operation

- Ride the horse in the direction it's going—seek alliances with DP outsourcing/FM vendors (to handle VIP).

- Sell directly to users who want to outsource all of their VIP (but not DP) due to special requirements, technology confusion, risk aversion.

IV. Enhanced Service Opportunities

- Intentionally Blank -

A. Enhanced Services

General Findings

1. Most enhanced opportunities:

a. Are closely related to basic applications or the forms business (EDI)

b. This does not mean both are equally capturable.

c. Associated with two way/transaction type applications rather than one way mailings

2. Only a few niche opportunities were identified.

3. Enhanced opportunities are fewer in number than basic ones and tend to be more cross-industry in nature.

4. Market reaction to expanding into front end or back end services from basic imaging was not highly encouraging:

- Few user problems exist.
- Often challenges another in-house organization's turf; address this by selling:
  - Customers' marketing function on front end opportunities
  - Customers' finance function on back end opportunities
- A successful vendor must do more than just replace what someone else is doing.

5. Some industries offer no enhanced opportunity.

B. Distribution of Enhanced Opportunities by Industry

1. The top three verticals comprise over 50% of the total enhanced opportunity.

2. Industries ranking highest in basic services rank lowest in enhanced ones:

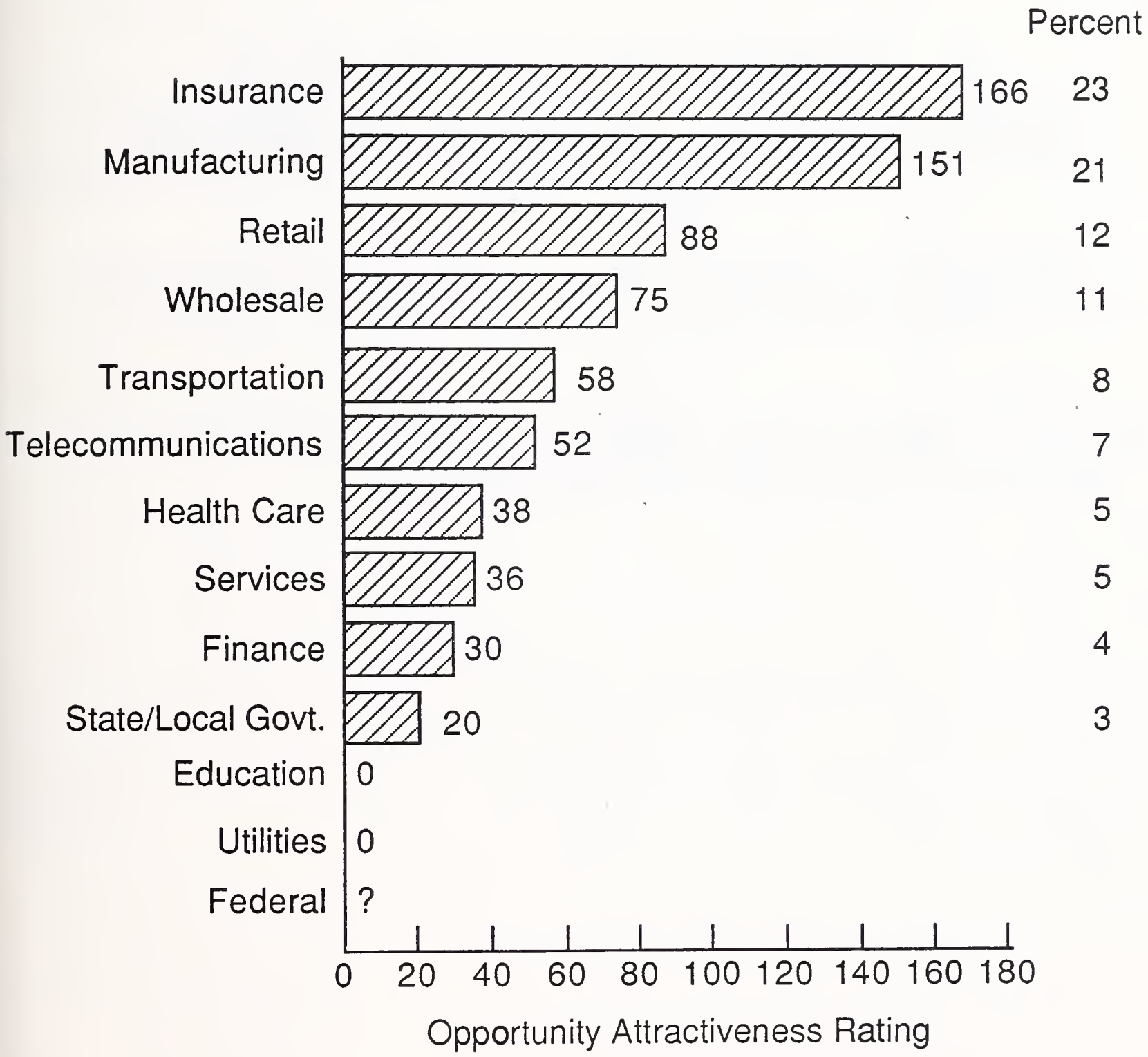
- Finance
- State and local government
- Education

3. In a like manner, low ranking basic opportunity verticals make a strong showing in enhanced services:

- Manufacturing
- Retail
- Wholesale

4. Federal opportunities are there, but hard to measure.

Enhanced Services Opportunity Attractiveness



C. Distribution of Enhanced Opportunities by Target Audience

1. Most opportunities are in consumer communications rather than in business-to-business communications.

2. Some opportunities involve no communications at all! They target improved internal efficiencies.

Enhanced Opportunity Attractiveness by Target Audience
(Attractiveness Rating)

Target Audience						
Owners	Employees	Customers		Suppliers	Internal Efficiency	Total
		Business	Consumer			
		Manufac. 125 Insurance 100 Wholesale 75 Retail 75 Transpor. 58 Health Care 38 Telecomm. 10 Services 6	Telecomm. 42 Services 30 Manufac. 26 Insurance 21 Retail 13		State/local govt. 20 Insurance 45 Finance 30	
Total		487	132		95	714
Percent of total		69	18		13	100

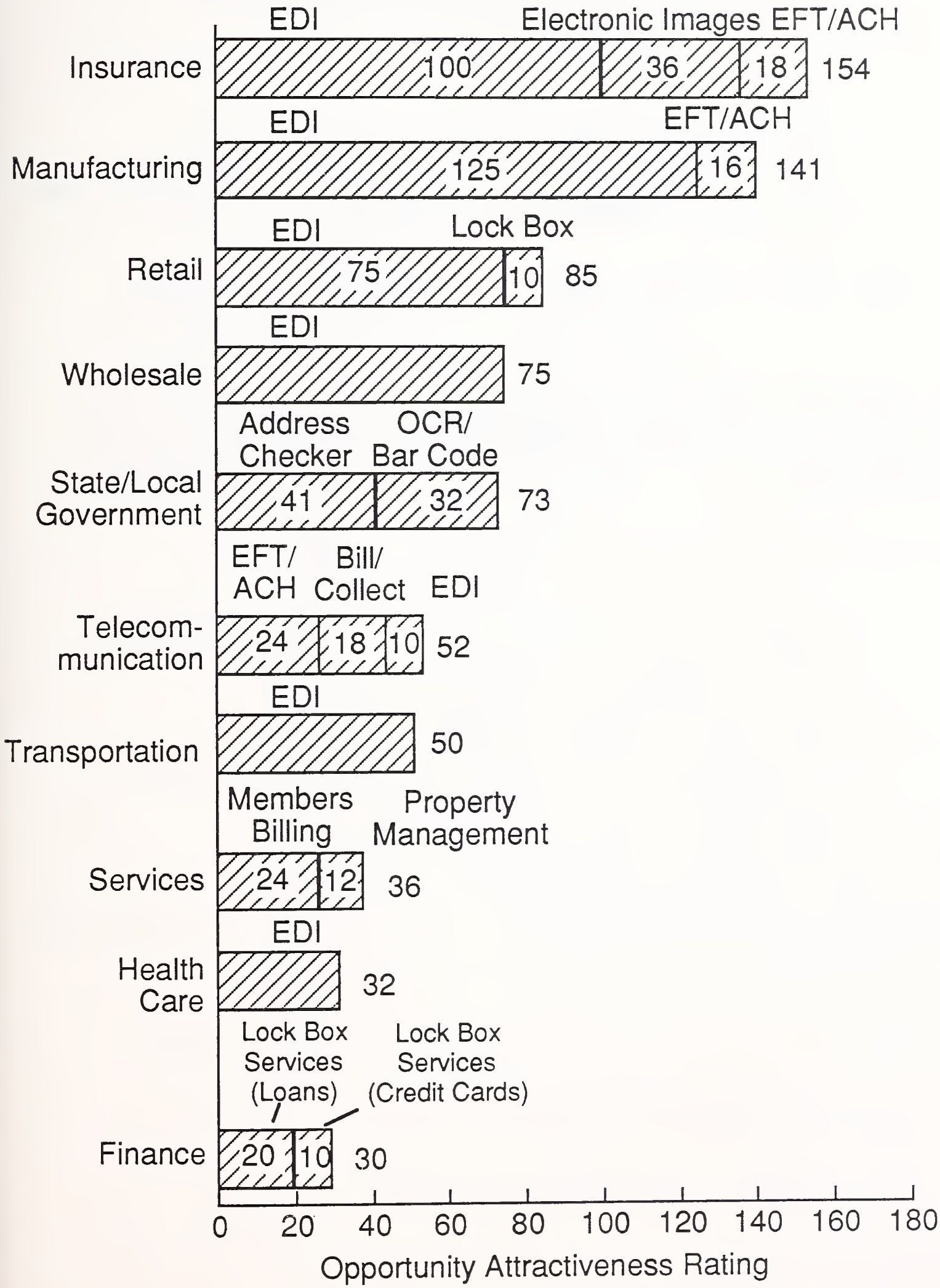
D. Where Are the Big Enhanced Service Opportunities?

1. Insurance, manufacturing, retail, and wholesale dominate on the strength of EDI.

2. Niche opportunities exist in:

- Services
  - Property management
  - Membership billing
- Insurance
  - Image storage
- State and local government
  - Address checking
  - OCR/bar coding

Enhanced Services Attractiveness (≥10 Rating)

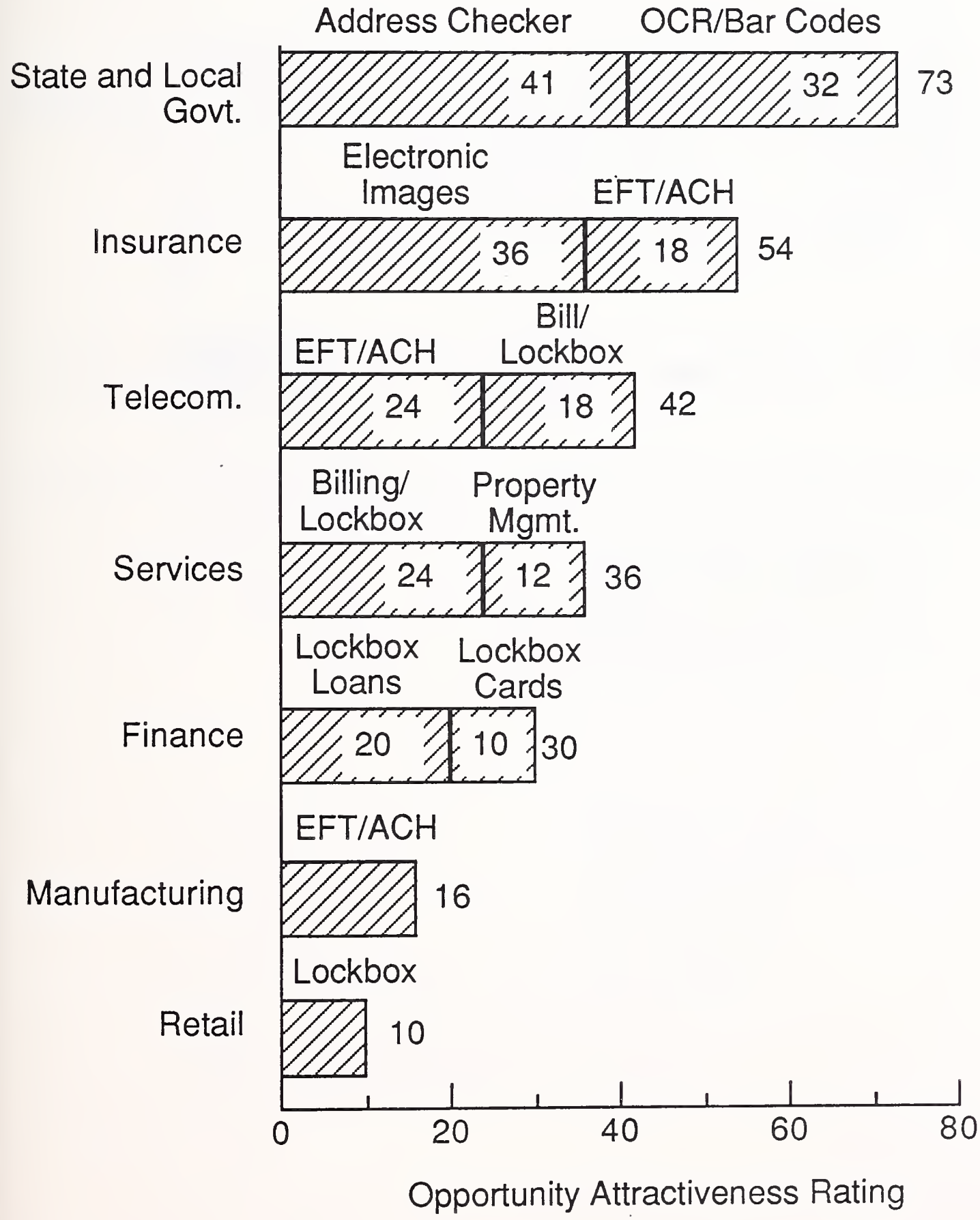


E. What Does It Look Like Without EDI?

1. Two-thirds of the opportunity (63%) disappears . . .

2. Industry ranking sharply realigns around services industries rather than manufacturing/transportation/ distribution.

Enhanced Opportunity Attractiveness Without EDI ($\geq$ 10 Rating)



F. Where Are the Cross-Industry Enhanced Opportunities?

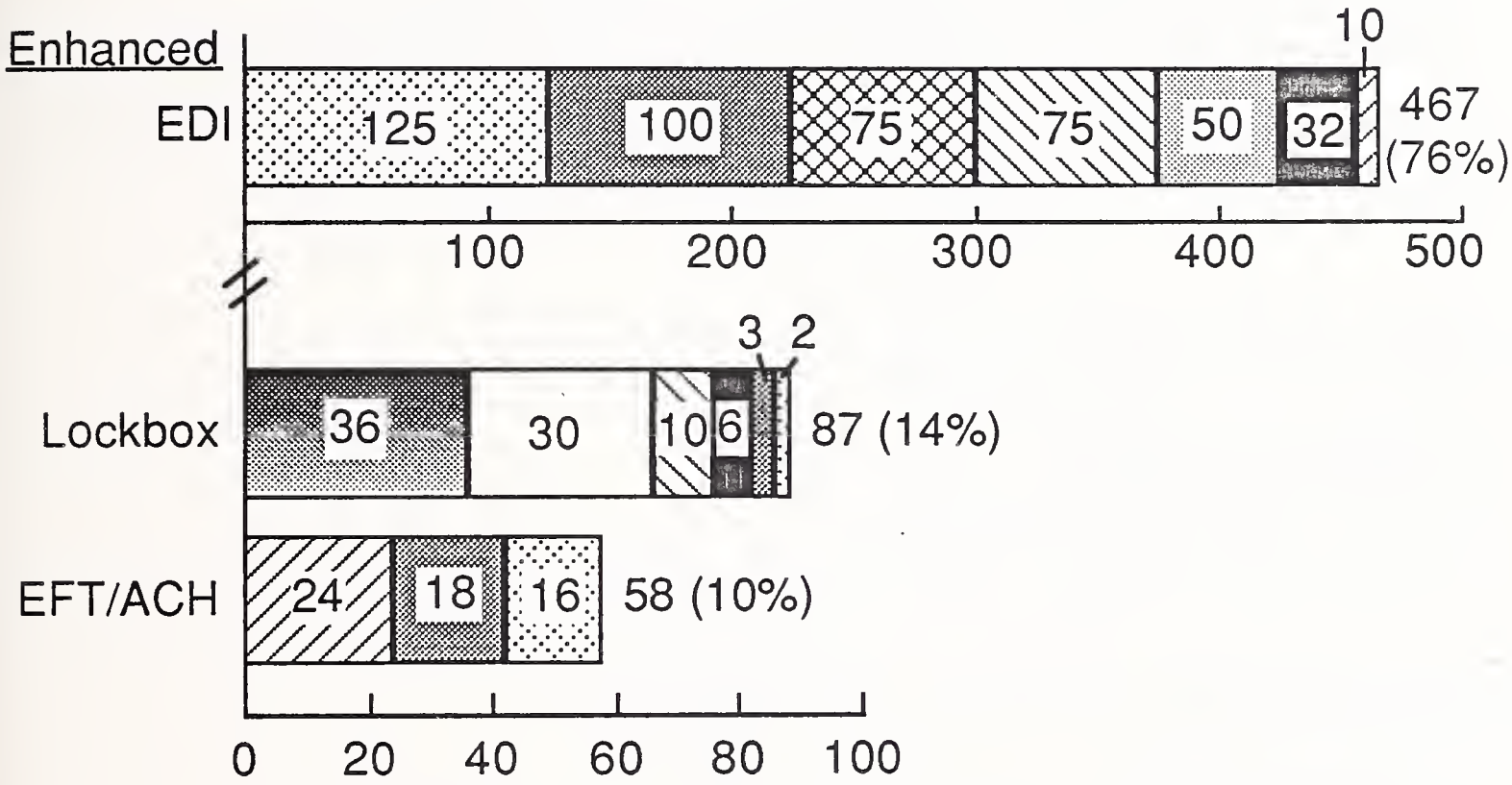
1. The focus issue appears relatively simple.

2. EDI dominates with 76% of the total.

3. Only two other choices exist:

- Lockbox services
- EFT/ACH services

Cross-Industry Enhanced Applications Opportunity Attractiveness



- Manufacturing
- Insurance
- Wholesale
- Retail
- Transportation
- Health Care
- Telecommunications
- Services
- Finance
- Utilities

Note: Percentages shown are percent of total enhanced services.

G. EDI Services

1. What is EDI?

- The application-to-application exchange of intercompany business data in standard formats
- The computer-to-computer exchange of intercompany business documents and related information

2. What does EDI replace?

- Business forms
- U.S. post office

3. What are EDI end-user benefits?

- Fewer errors
- Faster turnaround
- Reduced expenses
- Improved customer service
- Enhanced management control

G. EDI Services

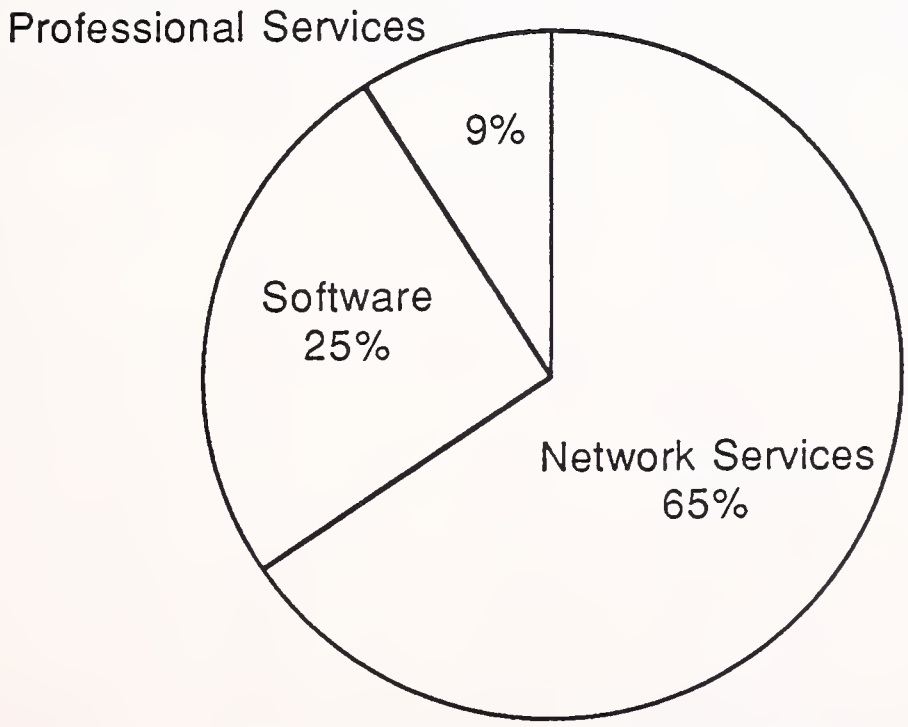
4. U.S. EDI market characteristics

- 20 years old—slow to take off
- Now reaching critical mass
- Primarily a network services market

EDI Use Is Quickly Expanding

*INPUT survey of 200 companies

1993 EDI Market Components



1993 commercial market $0.6 billion

G. EDI Services

5. EDI opportunity attractiveness
   - Largest single opportunity of any type identified by INPUT
   - High willingness to outsource and internal priority
   - EDI can spawn front and back end data base services:
     - Inventory management
     - Transportation shipment status reporting
   - Industry penetration strategy would follow patterns of trading relationships:
     - Manufacturing/wholesale/retail/transportation
     - Health care/insurance
     - Telecommunications
       - Proviso: Note that EDI opportunity size is a measure of the latent potential of a new technology while other opportunity measures are of fully realized/adopted markets.

Vertical Market	Opportunity Size ($ M)	Opportunity Size Rating	x	Willingness to Outsource	x	Internal Priority	=	Attractiveness
Insurance	1,694	5		5		4		100
Manufacturing	1,110	5		5		5		125
Wholesale Distribution	397	3		5		5		75
Retail Distribution	340	3		5		5		75
Health Care	276	2		4		4		32
Transportation	113	2		5		5		50
Telecommunications	60	1		5		2		10
Total	3,990							467

G. EDI Services

6. Leading EDI vendors

	Est. 1989 EDI Revenues ($ Million)
GE Information Services	22
Ordernet	14
BT/Tymnet	12
Transnet	7
Kleinschmidt	6
Railinc	6
IBM	5
Control Data/Redinet	4
Western Union	1
Others	12
Total 1989 EDI network services market	89

G. EDI Services

7. EDI fit with Moore BCS

- A whole new business . . .
- More likely a corporate thrust with BCS leading
- EDI is a global business opportunity—Moore is a multinational corporation
- Moore has historic involvement through strategic customer services in forms inventory management
- EDI transaction types are analogs of business form types (e.g. orders, invoices, bill of lading)
- Addresses a threat to the forms business
- Same decision maker (IS management) as will be targeted for many other BCS basic and enhanced services
- Good market timing—ready to take off
- Capitalize on others' past mistakes and investments

- Intentionally Blank -

H. EFT/ACH Services

1. Basic business function is direct debit of customers for periodic bills.

2. Three primary business areas:

- Insurance (premium payments)
- Manufacturing (auto loan payments)
- Telecommunications (phone bills)

3. Insurance industry is a large biller of premium payments; manufacturing is a big user of coupon books. EFT/ACH (direct debit) replaces these basic applications.

4. Insurance industry most advanced in application of EFT/ACH; manufacturing next. Similar opportunities may be found in other niche areas (e.g. finance companies). All of these bill fixed-payment amounts.

5. Customer resistance to direct debit will continue for some time and require parallel output processing capabilities, so that each customer can elect either EFT/ACH or paper-based billing.

H. EFT/ACH Services

6. Replacing coupon books with direct debit does not provide significant opportunity for BCS, as BCS is not needed to handle EFT/ACH transaction.

7. Telecommunications has variable amount billed per month:

- Basic statement mailing cannot be eliminated because customers need billing details.
- Customers are less willing to accept direct debit for variable amounts, even with prior statement.

8. Suggested opportunity/focus:

- Look for firms that now do periodic fixed-amount billing and could be converted to parallel dual-mode output (EFT/ACH or paper)
- Milk coupon books; de-emphasize EFT/ACH as replacement
- Provide software and consulting services to retain account control when EFT/ACH introduction is inevitable in coupon book accounts

I. Retail Lockbox Services

1. Lockbox operating characteristics:

- Equipment and processing-intensive business
- Requires multiple geographic locations in key cities across U.S.
- Requires strategic alliances with multiple banks

2. Significant advantage to lockbox operator in being able to print the bill/coupon used for payment processing:

- Coordination of systems requirements is kept in-house.
- Maximizes ability to control quality at both ends of cycle (output production and turnaround data capture)

3. Significant advantage to lockbox operator in having access to data base that created the bill/coupon:

- Easy to validate payor and amount due
- Faster, more accurate/efficient updating of accounts payable data

4. Lockbox is an important part of other enhanced services such as property management.

I. Retail Lockbox Services

5. Lockbox can also lead to role as full-cycle processing services vendor:

- Produce all forms of billing-oriented output
  - Statements
  - Coupons
  - Electronic debits
- Accept all forms of payment
  - Checks
  - Electronic
- Maintain customer's database

6. Large portion of lockbox payments come from retail open accounts (e.g. credit cards, utilities, etc.) where there is either:

- Variable monthly amount due
- Customer option to pay varying amounts

These transactions will not be replaced by EFT/ACH payments, so future retail-based business volume is secure.

J. Enhanced Services Conclusions and Recommendations

1. Pursue EDI aggressively

2. Pursue lockbox/collection services

- Highly complementary to basic variable imaging services
- Supports gaining mission critical applications
- Offers operational leverage advantages
- Has potential for further processing services expansion
- Reasonably low risk
- Penetrate via acquisition or alliances

3. EFT/ACH should be lowest priority

- May be more of a threat than an opportunity

4. Selectively pursue "one-off" strategic customer services opportunities as they materialize to gain experience and credibility in enhanced offerings.

5. Consider niche opportunities (e.g., address checker and property management) jointly with MDMS.

V. The Whole Picture

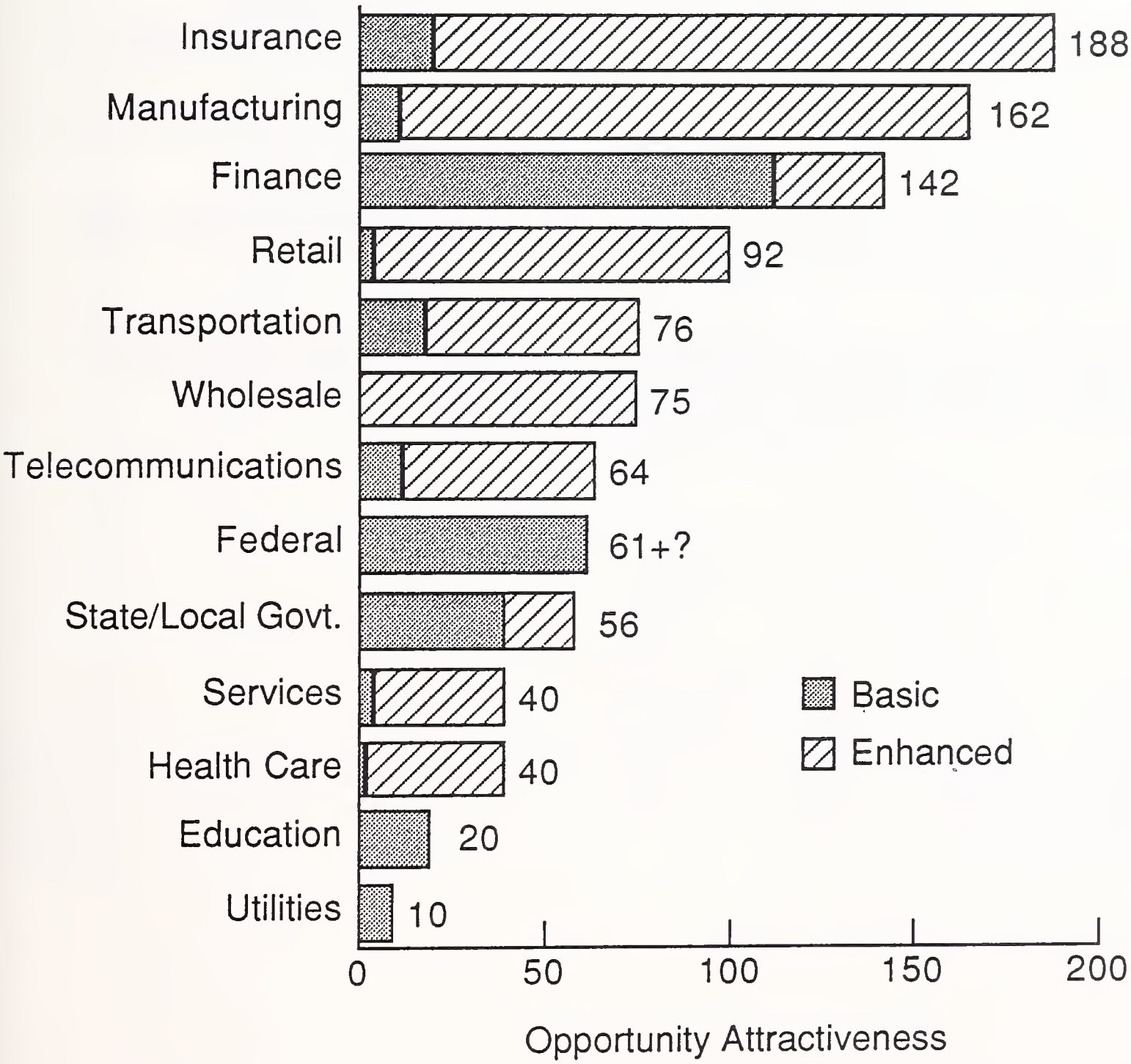
Combined Basic and Enhanced Opportunities

A. Distribution of Combined Opportunities by Industry

1. Industries tend to offer either basic or enhanced opportunities—only one (state and local govt.) shows a balance of opportunities

Combined Services (Basic + Enhanced)

Opportunity Attractiveness



B. Distribution of Combined Opportunities By Target Audience

1. The vast majority (79%) of BCS opportunities are customer communication applications.

They are evenly balanced between consumer and business-to-business communications.

Combined Services Attractiveness by Target Audience

	Target Audience						
	Owners	Employees	Customers		Suppliers	Internal Efficiency	Total
			Business	Consumer			
		Federal 30	Manufac. 125 Insurance 100 Wholesale 75 Transpor. 58 Health Care 40 Telecomm. 10 Services 8 State/local govt. 2	Finance 112 Telecomm. 54 Insurance 43 Manufac. 37 Education 10 State/local govt. 34 Services 32 Transpor. 18 Retail 7 Utilities 10 Federal 10	Federal 15 Retail 75	State/local govt. 20 Insurance 45 Finance 30 Retail 10	
Total		30	418	367	90	105	1010
Percent of Total		3	42	36	9	10	100

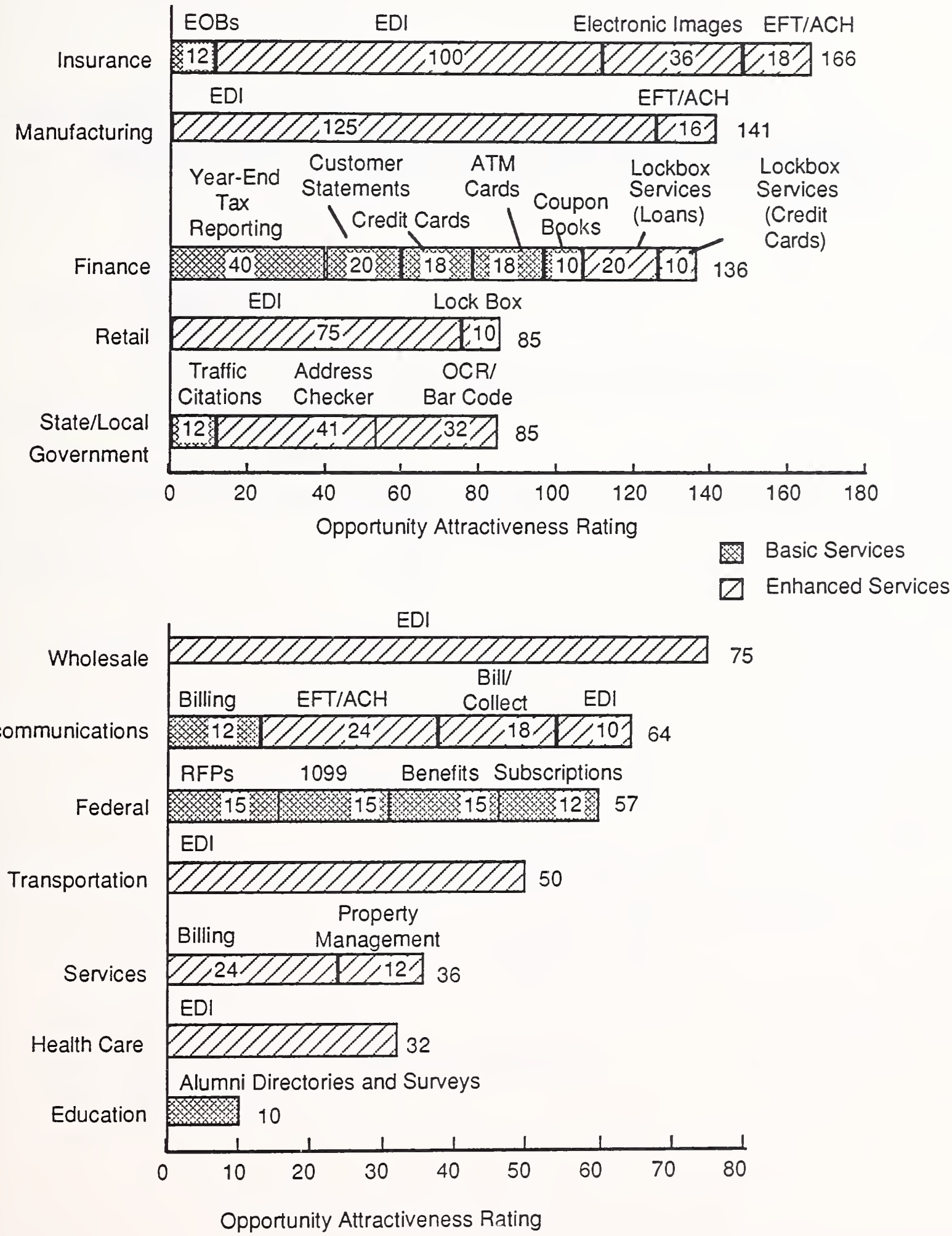
C. Where are the Big Combined Opportunities?

1. Every industry has them (except utilities)

2. The greatest number of big opportunities is in finance (7)

3. The big opportunity is EDI

Combined Opportunity Attractiveness (≥10 Rating)

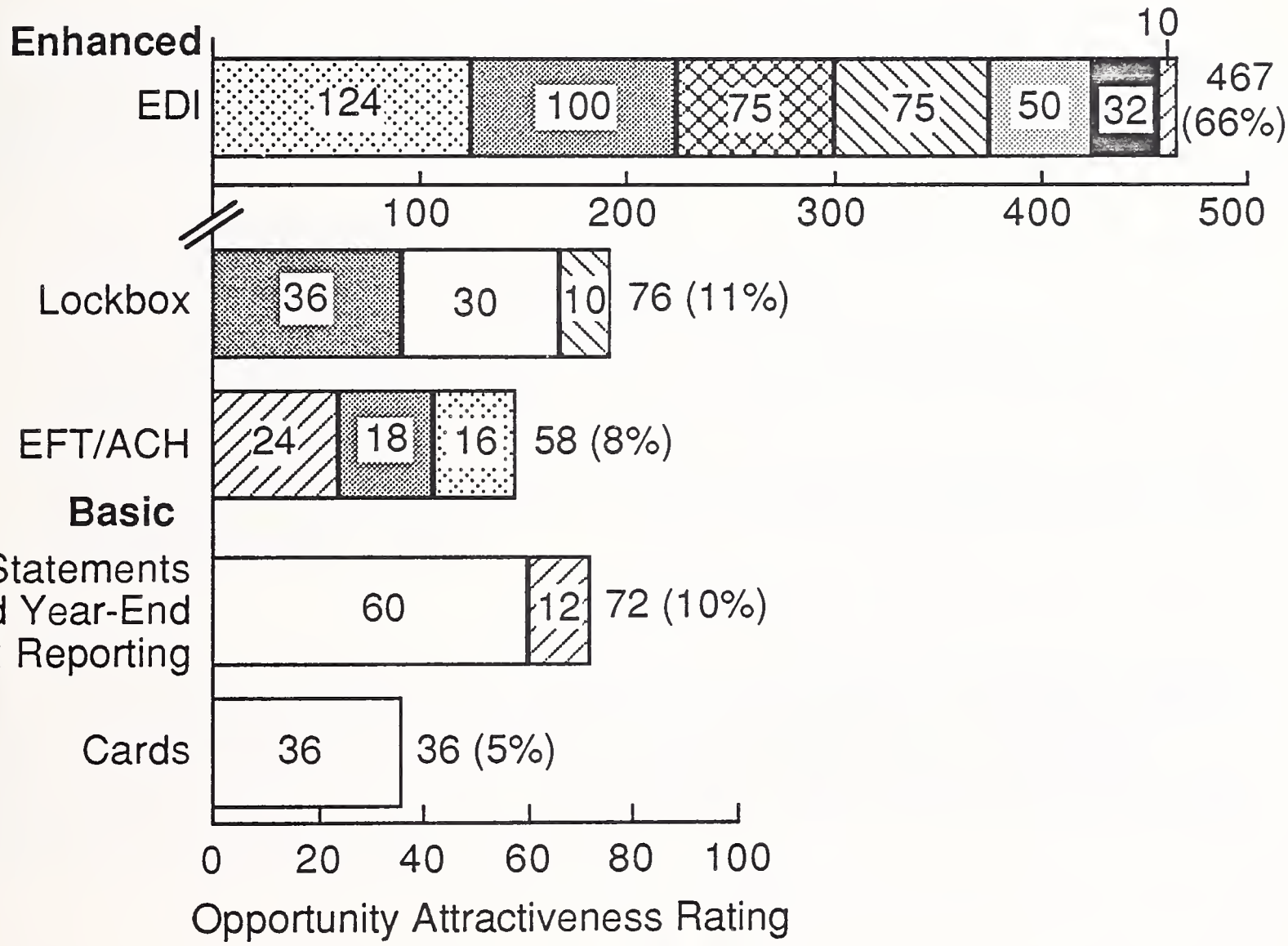


D. What Are the Combined Big Cross-Industry Opportunities?

1. Focus narrows to five services . . .

2. EDI dominates (66% of total opportunities)

Cross-Industry Applications Opportunity Attractiveness



- Manufacturing
- Insurance
- Wholesale
- Retail
- Transportation
- Health Care
- Telecommunications
- Services
- Finance

Note: Percentages shown are percent of total services

- Intentionally Blank -

E. Overall Conclusions

1. Moore BCS is a dominant force in its current business.

2. The outside/available market for variable imaging basic service is strategically at risk—downward pressure will come from:

- New equipment and technology available to in-house users
- Large firms providing services to smaller firms in the same industry
- DP systems operations (FM) vendors taking variable imaging with them

3. In spite of strong in-house competition, enough users will outsource mission critical applications to support reasonable BCS growth objectives—but this market will need to be developed by BCS.

4. Attractive enhanced services offer opportunities to both develop mission critical basic business as well as penetrate totally new markets.

5. Several niche applications are worth considering for high earnings potential rather than long-term growth.

F. Overall Recommendations

1. There is no one "perfect strategy" for BCS . . .
   - Pick logical/comfortable choices and aggressively pursue them
   - Study further the less certain opportunities
   - Discard what doesn't look or feel good

2. Acquire missing capabilities in highest priority services to ensure control

3. Use alliances in lower priority areas:
   - To test markets or services
   - To evaluate potential acquisitions (of tactical nature)
   - To lower risk and investment

4. Basic services:
   - Focus on finance industry
   - Emphasize statement and card processing services
   - Find a creative solution to peak season workloads
   - Evaluate niche opportunities in alumni directories/surveys and traffic citations
   - Pursue EOBs if also planning insurance industry EDI services
   - Evaluate offering facility management (system operation) services
   - Seek alliances with DP outsourcing vendors to handle their variable imaging work (new distribution channel)

F. Overall Recommendations

5. Enhanced services:

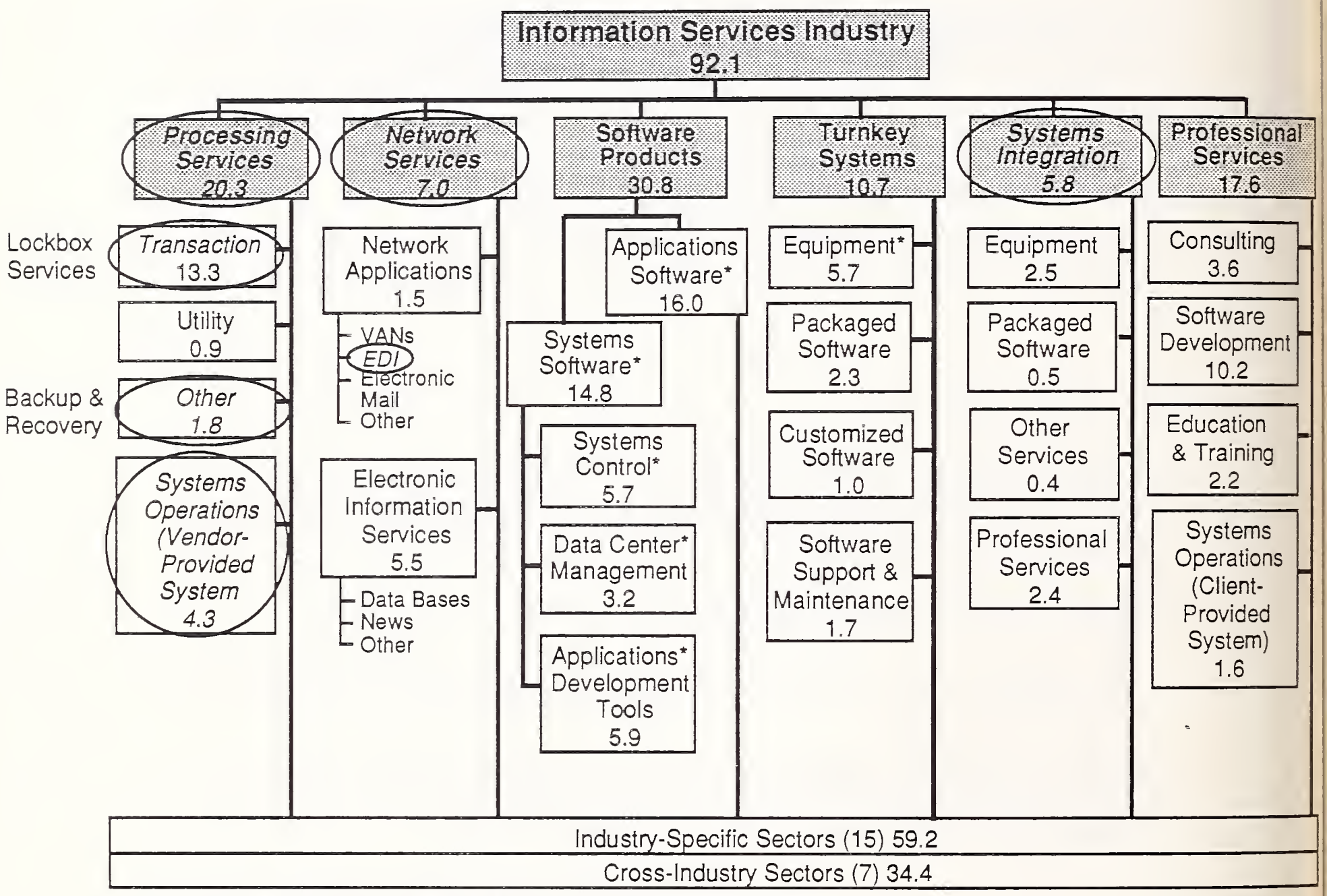
- EDI is the future . . . #1 priority—acquire a strong position
- Pursue lockbox services as part of the strategy to win mission critical basic applications (alliance leading to acquisition . . .?)
- EFT/ACH is lowest priority
- Selectively evaluate niche opportunities, e.g. address checker, property management, membership billing

6. Food for thought

- Seek alliances with system integrators to handle variable-imaging project requirements (another new distribution channel)
- Sell disaster recovery services to
  - Sungard, Comdisco for unique applications (another new channel)
  - End users directly as part of helping them install or upgrade in-house imaging operations

Where is INPUT Pointing Moore BCS?

Information Services Industry Structure—1989 ($ Billions)



*Broken out by Workstation/PC, Minicomputer, and Mainframe segments

Source: INPUT

Appendix A

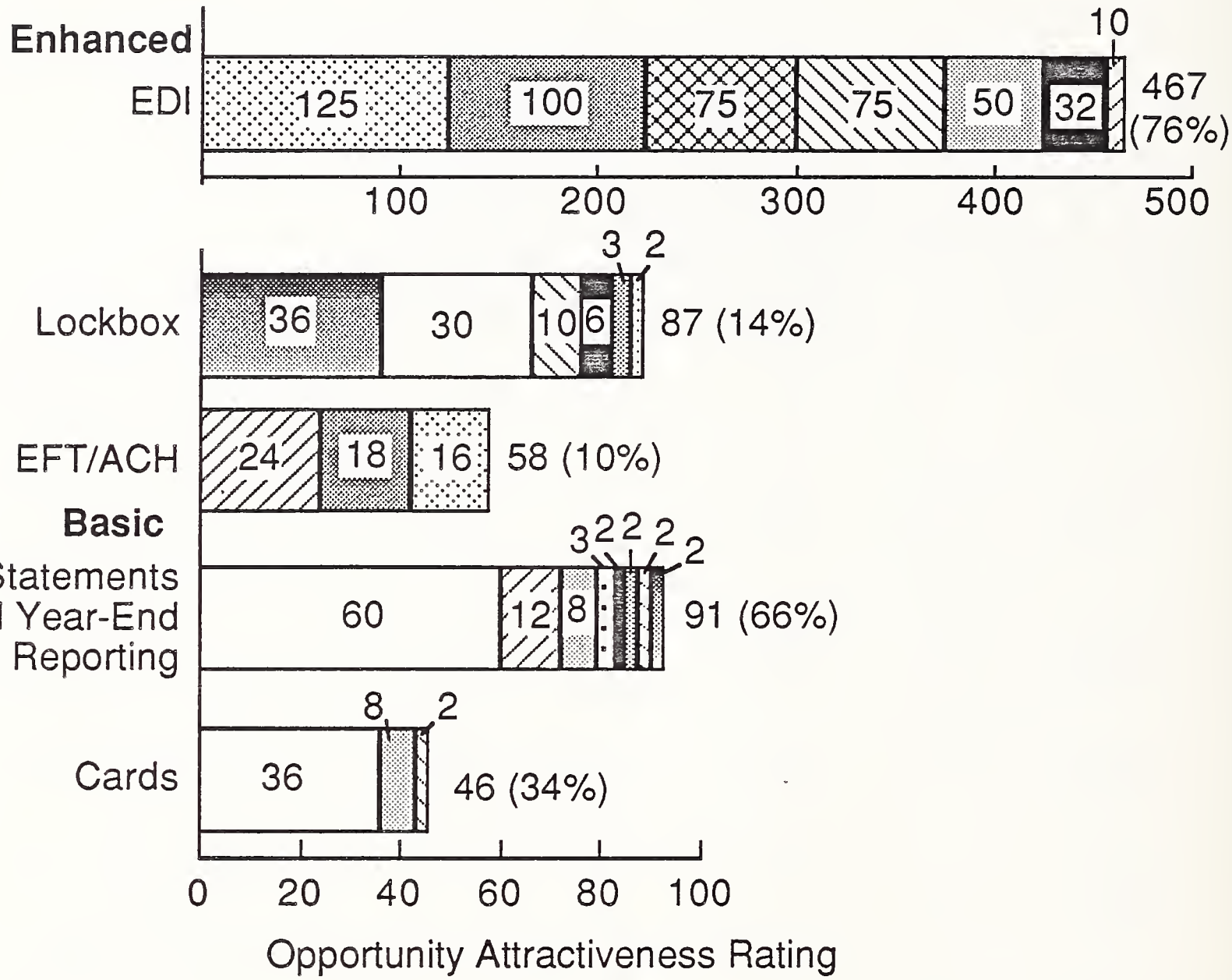
EDI Opportunity Size Calculation

Vertical Market	1993 EDI Market Forecast* ($ Millions)	Assumed 1993 Percent Penetration of Latent Potential Market	EDI Opportunity Size ($ M)
Insurance	34	2	1,694
Manufacturing	222	20	1,110
Wholesale Distribution	119	30	397
Retail Distribution	102	30	340
Health Care	26	10	276
Transportation	34	30	113
Telecommun-ications	6	10	60
Total	543	14	3,990

*Network services only (65% of total market)

Appendix B

Cross-Industry Applications Opportunity Attractiveness
(All Size Opportunities)



- Manufacturing
- Insurance
- Wholesale
- Retail
- Transportation
- Health Care
- Telecommunications
- Services
- Finance
- Utilities

Note: Pecentages shown are percent of total enhanced or total basic services

Appendix C

Half-Dozen Ways Less Means More In Capital Gains

By Alan Reynolds

Tax policy is too important to be de-
ed by the accountants who estimate rev-
ues. President Bush has a clear mandate
cut the tax rate on long-term capital
ns. His critics have not dared to suggest
t a single individual would be harmed
a lower capital gains tax. And nobody
ies that a lower capital gains tax would
) invigorate the sluggish U.S. economy.
ead, the whole issue has been mired in
flicting estimates about how much tax
nue would be gained or lost in later
s.

oth the Joint Committee on Taxation
the Treasury Department have ig-
d most of the ways in which a lower
al-gains rate would increase both fed-
and state tax revenues from a variety
urces, not simply from capital gains
selves. And they have also ignored
eduction of government spending due
ver interest rates.

e official revenue estimates simply
ne that a lower tax rate on capital
would have no effect on the value of
; and bonds, no effect on capital mo-
and economic efficiency, no effect
ture capital investment and no ef-
tax evasion. That is, the revenue
tes assume away *all* of the main is-
The huge "unexpected" revenue
ll this April from reducing marginal
es last year is an example of how
revenue estimates invariably miss
amic effects.

t, the higher prospective after-tax
n stocks and bonds would surely be
zed in higher prices for stocks and
There would be larger capital gains
ked. Although this effect was suffi-
bvious to get some attention when
tal-gains tax was reduced in 1978,
being dismissed by everyone ex-
estors themselves.

d, "unlocking" gains by reducing
centive to sell assets is not sim-
e-time effect, as most estimates
By reducing the tax penalty on re-
apital gains, investors would be-
to move funds out of yesterday's
nto today's most promising new
ie increased mobility of capital
rease economic growth, and thus
the entire federal and state tax
y year, including taxable corpo-
ts and payrolls.

a lower capital gains tax would
duce the incentive to engage in
buyouts and other devices to
debt for equity. With a high cap-
ax, individuals have little inter-
wth stocks or venture capital
ch offer only the hope of divi-
e distant future. Instead, taxa-
rs now lean toward immediate
om interest on municipal or
commodity speculation, or div-
established blue chip firms. A
al gains tax would increase in-
mand for shares of firms that
w to pay dividends, and too
ie commercial paper. With the
ssure on companies to become
aged, interest deductions from
rofits would be reduced and
ore revenue had from the cor-
ne tax.

Sell the Mailroom

By Peter F. Drucker

More and more people working in and for organizations will actually be on the payroll of an independent outside contractor. Businesses, hospitals, schools, governments, labor unions—all kinds of organizations, large and small—are increasingly "unbundling" clerical, maintenance and support work.

Of course, the trend is not altogether new. A great many American hospitals—and European and Japanese hospitals as well—now farm out maintenance and patient feeding; 40 years ago none did. "Temporary help" firms go back more than 30 years; but while in the beginning they handled file clerks and typists, they now provide computer programmers, accountants, engineers, nurses and even plant managers. Cities farm out "waste management" (once known as street cleaning and garbage disposal); even prisons are being run by private contractors.

Farm Out Clerical Work

The trend is accelerating sharply in all developed countries. In another 10 or 15 years it may well be the rule, especially in larger organizations, to farm out all activities that do not offer the people working in them opportunities for advancement into senior management. This may indeed be the only way to attain productivity in clerical, maintenance and support work. And increased productivity in such work will increasingly become a central challenge in developed countries, where such work now employs as many people as manufacturing does.

Support work is rapidly becoming capital-intensive. In many manufacturing companies, the investment in information technology for each office employee now equals the investment in machinery for each production worker. Yet the productivity of clerical, maintenance and support work is dismally low, and is improving only at snail's pace, if at all. Unbundling will not by itself make this work more productive. But without it the productivity of clerical, maintenance and support work is unlikely to be tackled seriously.

In-house service and support activities are de facto monopolies. They have little incentive to improve their productivity. There is, after all, no competition. In fact, they have considerable disincentive to improve their productivity. In the typical organization, business or government, the standard and prestige of an activity is judged by its size and budget—particularly in the case of activities that, like clerical, maintenance and support work, do not make a direct and measurable contribution to the bottom line. To improve the productivity of such an activity is thus hardly the way to advancement and success.

When in-house support staff are criticized for doing a poor job, their managers are likely to respond by hiring more people. An outside contractor knows that he will be tossed out and replaced by a better-performing competitor unless he improves quality and cuts costs.

The people running in-house support services are also unlikely to do the hard, innovative and often costly work that is required to make service work productive. Systematic innovation in service work is as desperately needed as it was in machine in the 50 years between Frederick Winslow Taylor in the 1870s and Henry Ford in the 1920s. Each task, each job, has to be analyzed and then reconfigured. Practically every tool has to be re-designed.

When Ray Kroc, the founder of McDonald's, set out to make hamburger shops more productive, he re-designed every single implement, including spoons, napkin holders and skillets. To improve productivity, hospital-maintenance companies have had to re-design brooms, dust pans, waste paper baskets and even sheets and blankets. In building Federal Express, Fred Smith studied every single step in the collecting, transporting and delivering packages, and in billing for the work. And then people have to be trained and trained and trained. This requires single-minded, almost obsessive dedication to one narrow objective—making hamburgers, making hospital beds, delivering packages—to the exclusion of everything else. But such single-minded dedication is far more characteristic of an independent, outside entrepreneur than of a department head within an organization who is expected to be a team player.

Drucker on Management

When criticized for doing a poor job, the managers of in-house support staff are likely to respond by hiring more people. An outside contractor knows that he will be tossed out and replaced unless he improves quality and cuts costs.

The most important reason for unbundling the organization, however, is one that economists and engineers are likely to dismiss as "intangible": The productivity of support work is not likely to go up until it is possible to be promoted into senior mangement for doing a good job at it. And that will happen in support work only when such work is done by separate, free-standing enterprises. Until then, ambitious and able people will not go into support work; and if they find themselves in it, will soon get out of it.

It is hardly coincidental that the productivity decline in American factories set in as soon as finance and marketing were taking over from manufacturing in the early '60s as the main avenues of advancement into senior management. Nor is it coincidence that stock brokers have been plagued by recurrent "back office" problems despite steadily increasing employment and increasing investment in clerical support work. Until very recently every head of the back office (though responsible for half the firm's expenses), was at best a "titular" partner. Promotions, bonuses but equally the time available on the golf course of top management were reserved by and large for traders, analysts and salesmen.

They are "we"; the back office are "they." And one explanation why non-instructional costs in colleges and universities have risen twice as fast as instructional ones since World War II—to the point where they now account for almost two-fifths of the total bill—is surely that the people who run the dorms or the business office don't have Ph.D.s and are therefore non-persons in the value system of academia.

Forty years ago, service and support costs accounted for no more than 10% to 15% of total costs. So long as they were relatively marginal, their low productivity did not matter. Now that they are more likely to take 40 cents out of every dollar they can no longer be brushed aside. But value systems are unlikely to change. The business of the college, after all, is not to feed kids but it is teaching and research.

However, if clerical, maintenance and support work is done by an outside independent contractor it can offer opportunities, respect and visibility. As employees of a college, managers of student dining will never be anything but subordinates. In an independent catering company they can rise to be vice president in charge of feeding the students in a dozen schools; they might even become CEOs of their firms. If they have a problem there is a knowledgeable person in their own firm to get help from. If they discover how to do the job better or how to improve the equipment they are welcomed and listened to. The same is true in the independent firm that takes over customer accounting in the mutual-fund company.

Pushing Vacuum Cleaners

In one large hospital-maintenance company, some of the women who started 12 or 15 years ago pushing vacuum cleaners are now division heads or vice presidents and own substantial blocks of company stock. As hospital employees, most of them would still be pushing vacuum cleaners.

Of course there is a price for unbundling. If large numbers of people cease to be employees of the organization for which they actually work, there are bound to be substantial social repercussions. And yet there is so far no other option in sight for giving us a chance to tackle what is fast becoming a central productivity problem of developed societies.

Mr. Drucker is a professor of social sciences at the Claremont Graduate School in California.

The S&L Bailout's Critical Moment

By Martin Mayer

This morning at 9, the Senate and